Marine Life Protection Act Initiative

Public Comments Submitted

through March 10, 2010

From: mark taylor
Sent: Tuesday, March 09, 2010 11:18 PM
To: MLPAComments
Subject: what happens later?

Dear MLPA,

I'm curious. With all the talk of monitoring and adaptive management of MPAs, what is the process for changing anything? Would there be public hearings if it's determined that an MPAs designation should be changed or its boundaries adjusted. And who evaluates the results of the monitoring? Will the SAT still be in existence 5 or 10 or 20 years from now? Is there still a place for community involvement after the RSG process, or does it all become DFG's show?

I understand you guys will disappear as an entity when the process is over. You've done your best to outreach through it all, but what happens when you're gone?

Mark Taylor

POTTER VALLEY TRIBE

2251 S. State St. ⊙ Ukiah, California 95482

(707) 462-1213 ⊙ Fax (707) 462-1240 ⊙ E-mail: pottervalleytribe@ pottervalleytribe.com

Chairperson	*Secretary*	*Treasurer*	*Member-At-Large & Appointed Spokesperson*
Salvador Rosales	*Rosemary Rahmaoui*	*Losario Rosales*	*Norma Rosales*

To: Officials and Representatives of the United States and California State Governments, their agencies and contractors involved in oversight and development of the California Marine Life Protection Act

February 24, 2010

Dear sir or madam:

Because the California Marine Life Protection Act (MLPA) involves multiple jurisdictions of land and waters of the US, State of California and Indian Tribes, we are submitting the attached background information and resolution regarding the MLPA and impacts on Tribal resources.

Northern California Indians have inhabited the Pacific North Coast for over 12,000 years and rely on the coast and the ocean for a variety of essential uses including spiritual, ceremonial, cultural, and substance harvesting and gathering of marine life; adapting to and managing changes in environmental and social conditions throughout time. As an intrinsic part of the ecosystem, northern California Indians continue to thrive as stewards of the environment, a stewardship based in sustainability through traditional ecological and cultural knowledge.

Northern California tribes, as distinct sovereign nations, have various areas for substance, cultural and ceremonial purposes, as well as lands indentified as ancestral. The Tribes of northwestern California affected by the MLPA shall, as sovereign nations, retain the right to continue subsistence and ceremonial gathering within or outside any protected area created through the Act.

Tribal Nations retain a government-to-government relationship with the United States that includes multi-faceted fiduciary trust responsibilities. These responsibilities should be acknowledged by the state of California, recognizing sustainable harvesting and gathering as a key principle in cultural preservation and contemporary management efforts; in support of tribal efforts.

Representatives from northern California Indian Tribes recognize the beneficial effects of traditional management practices on the ecosystem and, agree that traditional subsistence and ceremonial gathering shall not be regulated through this Act.

We respectfully request the Marine Life Protection Act Initiative recognize the sovereign rights of tribal nations and their citizens to subsistence and ceremonial gathering and propose co-management responsibilities between tribal governments and state or federal agencies in any protected areas. Attached is Tribal Resolution 02-24-10-001, along with supporting information, demanding an immediate exclusion for California Tribes under the MLPA which will allow unobstructed access to fish and gather traditional foods along the California coast, until the impacts of the MLPA on the Tribe can be evaluated and addressed according to our needs and cultural history.

Salvador Rosales, Tribal Chairman

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Salvador Rosales	*Rosemary Rahmaoui*	*Losario Rosales*	*Norma Rosales*

CALIFORNIA MARINE LIFE PROTECTION ACT AND PROTECTION OF ABORIGINAL RIGHTS

RESOLUTION NUMBER 02-24-10-001

WHEREAS: The Tribal Council of the Potter Valley Tribe has declared its commitment to promote the health and welfare of its members and families, and in furtherance of the sovereign right of self-governance, promotes the establishment and maintenance of the highest attainable standards of environmental quality within the Tribe's ancestral territory.

WHEREAS: The Potter Valley Tribe is located within its aboriginal homelands, and has continued to use and occupy these ancestral lands which are now part of Mendocino and Lake Counties, California; and

WHEREAS: The Potter Valley Tribe strives to promote and perpetuate the protection of natural resources, including historical, cultural, archaeological, and sacred sites, for future generations and thus strongly supports conservation and protection of such resources; and

WHEREAS: The Indians of California, both coastal and inland, have relied on and used coastal resources since time immemorial for subsistence, trade, ceremonial and religious purposes, the protection of the aboriginal food sources, and traditional gathering/harvesting practices are a fundamental human right which is important to all California Indians; and

WHEREAS: Due to this reliance on the coastal resources by California Indians, there are historic and prehistoric cultural resources sites along the coastal zones which tribes have an interest in protecting; and

WHEREAS: Many tribes in California have maintained prescriptive rights to fish, harvest seaweed and shell fish, and practice their religion along the coast at their usual and customary places within their traditional and historic territories as they have done since time immemorial; and

WHEREAS: Many California tribes rely on their ability to fish, and harvest seaweed and shell fish, which are their traditional foods, and to use the shells for religious regalia and sacraments, for the physical and mental health and welfare of their members; and

WHEREAS: Native Californians are in inseparable part of the environment, having lived and evolved with the natural environment since time immemorial; and

WHEREAS: The State of California (State) has enacted the Marine Life Protection Act (MLPA) for the purpose of increasing coherence and effectiveness in protecting the state's marine life and habitats, marine ecosystems, and marine natural heritage, as well as to improve recreational, educational and study opportunities provided by marine ecosystems subject to minimal human disturbance through the creation of Marine Protection Areas (MPA); and

WHEREAS: The Task Force created to oversee implementation of the MLPA is comprised of persons from commercial, educational , and environmental communities which have little knowledge of traditional tribal practices with respect to subsistence fishing and harvesting, and which Task Force has already made determinations detrimental to the fishing, harvesting and religious rights of California tribes; and

WHEREAS: The State is in the process of designating coastal areas for restricted use to promote the conservation and recovery of marine plant and animal communities, but to date has not conducted government-to-government consultation with any California tribes to discuss and assess the potential negative impacts of such restricted uses on California tribes' traditional subsistence fishing, gathering/harvesting, and religious rights; and

WHEREAS: The State has not given adequate notice to the Potter Valley Tribe to evaluate impacts of the MLPA on natural, cultural and historical resources of the Tribe, and to organize and formulate responses to those impacts; and

WHEREAS: The focus of the Task Forces is to address the recreational, educational and commercial opportunities of these coastal waters, however, such uses are typically the antithesis of tribal uses, and therefore tribal rights and interests have not been considered in the process; and

WHEREAS: California tribes, as the original stewards of this land, retain original usufructary rights to protect the land, air, water, and food sources upon their homeland; and

WHEREAS: The failure of the State to conduct government-to-government consultation with tribes violates the spirit and intent of the Federal and State consultation policies *(See Executive Memorandum of April 29, 1994 on Government-to-Government Relations with Native American Tribal Governments, Executive Order of November 6, 2000 on Consultation and Coordination with Indian Tribal Governments, Presidential Memorandum of November 5, 2009 on Tribal Consultation; California Government Code sections 11019.8 and 65040.12(e); California Public Resources Code section 5097.9)* which are designed to assure adequate input from affected tribes; and

WHEREAS: The failure of the State to consider tribal rights and religious practices when designating restricted areas violates the Religious Freedom Restoration Act and the American Indian Religious Freedom Act because such designations impede the ability of tribes to practice their traditional religions through use of the coastal areas for

ceremonies and harvesting and gathering of ceremonial sustenance and objects.

NOW THEREFORE BE IT RESOLVED THAT: The Potter Valley Tribe hereby demands that the State immediately engage in government-to-government consultation with California tribes concerning the negative impacts to tribal rights and interests by the MLPA and the designation of MPAs; and

NOW THEREFORE BE IT FURTHER RESOLVED THAT: The Potter Valley Tribe demands that the State assure the protection and continued practices of California tribes in the use of the coastal resources for subsistence, ceremonial and cultural uses when implementing the MLPA through the designation of MPAs; and

NOW THEREFORE BE IT FINALLY RESOLVED THAT: The Potter Valley Tribe hereby demands an immediate exclusion for California Tribes under the California Marine Life Protection Initiative which will allow unobstructed access to fish and gather traditional foods along the California coast, until the impacts of the MLPA on the Tribe can be evaluated and addressed according to our needs and cultural history.

CERTIFICATION

The foregoing resolution was adopted by a vote of 3 for and 0 against and 0 abstentions, at a meeting of the Tribal Council , at which a quorum was present, on the 24th day of February , 2010

Salvador Rosales, Chairman — 2/24/10 Date

Rosemary Rahmaoui. secretary — 2/24/10 Date

From: Allen Sansano
Sent: Monday, March 08, 2010 4:30 PM
To: MLPAComments
Subject: BRTF Field Trip Mar 2 .. guidelines for participation

During the portion of the field trip at Pacific Rim Seafood, kayak anglers were invited to talk to the BRTF. At the time of the discussion, Samantha Murray asked questions and interjected her comments at her own leisure. Are there any sort of guidelines as to who can participate during these sessions? Samantha Murray is not involved in the North Coast MLPAI in any official capacity nor does she represent kayak fishing interests. Her questions were obviously very leading with a particular anti-fishing message in mind. I think it was highly inappropriate for her to intrude on OUR time to discuss OUR issues with the BRTF.

-Allen

From: allen.sansano@gmail.com [mailto:allen.sansano@gmail.com]
Sent: Saturday, March 06, 2010 7:09 AM
To: MLPAComments
Subject: SAT Questions

1) The SAT presentation, "MPA Size and Spacing Guidelines and Evaluations for the MLPA North Coast Study Region" (http://nrm.dfg.ca.gov/FileHandler.ashx?DocumentVersionID=29793) has 3 pages of charts at the end that is footnooted with the comment "Moffitt et al. (in review)". This paper and work is NOT available to the public at this time, as it is "in review", and therefore is NOT Best AVAILABLE Science since it is not available.

2) What is the definition of "Best Available Science" that the MLPA is using?

3) As part of the SAT meetings, is there any subgroup working on Gap Analysis, basically identifying any and all shortcomings in the science being used?

4) All the presentations at the SAT are lacking in references to the actual work that the "science" is based on. For the record, can the exact research (published findings and source funding) be added as reference to all science presentations and decisions based on that research?

-Allen

From: Hawk Rosales
Sent: Wednesday, March 03, 2010 12:36 AM
To: Roberta Cordero; Cathy Reheis-Boyd; Atta Stevenson
Cc: Cindy Gustafson; Meg Caldwell; Virginia Strom-Martin; Jimmy Smith; Greg Schem; Bill Anderson; Ken Wiseman; Melissa Miller-Henson
Subject: Tribal Field Trip

Dear Roberta and Cathy:

Thank you for your response on this subject. Might the Blue Ribbon Task Force consider a July field trip to the Sinkyone Wilderness coast--hosted jointly by InterTribal Sinkyone Wilderness Council and our partner California State Parks to showcase our collaborative work in stewarding and restoring this important coastal/marine ecosystem? Our Council owns and manages the 3,845-acre InterTribal Sinkyone Wilderness containing the upper and middle reaches of 7 coastal watersheds of critical biological and cultural importance along this remarkable wilderness coastline. We also assist in the stewardship and rehabilitation of the adjacent 7,250-acre Sinkyone Wilderness State Park which contains the extreme lower reaches of these watersheds.

If you like, I can talk to our board of directors and with our friend and colleague Steve Horvitz, Superintendent of State Parks' North Coast Redwoods District, to see how this might best be arranged.

Roberta, awhile back I emailed you the link to our InterTribal Sinkyone Wilderness page on the "State Parks Partners" website. I have attached this link again to share with the other BRTF members so they can learn more about our Council's cultural-ecological conservation work:
http://www.parks.ca.gov/pages/795/files/07%20caspp%20natural%20resource%20partners.pdf

Also, here is the link to our page at the Trees Foundation, where you can find additional links to a number of articles we have written about Native conservation and restoration work: http://www.treesfoundation.org/affiliates/specific-22

In upcoming days, our Council will be providing you and the other BRTF members with more information about our developing position and recommendations on Tribal prerogatives and uses relative to the MLPA Initiative. We also hope to more fully acquaint you with our work to protect, preserve, and restore the spectacular Sinkyone coast, which--by the way--is home to an endemic and very colorful variety (or possibly subspecies) of coastal stream resident trout that has been examined and analyzed by fish biologists.

Below is one of my photos of the "Lost Coast" of Sinkyone, taken from Bear Harbor looking toward the Anderson Cliffs and the mouth of Wolf Creek. Those cliffs are around 1,000 feet high. However, we have the ability to access by vehicle some of the remote areas of this coastline for small groups of visitors focused on conservation work.

All the best,
Hawk

Hawk Rosales, Executive Director
InterTribal Sinkyone Wilderness Council
P.O. Box 1523
Ukiah, CA 95482
Phone: (707) 468-9500 Fax: (707) 462-6787
intertribalsinkyone@sbcglobal.net

On Mar 2, 2010, at 6:44 PM, Cathy Reheis-Boyd wrote:

Great idea! I would really enjoy that.

.....

Catherine Reheis-Boyd
Western States Petroleum Association
President
Work (916) 498-7752
Cell (916) 835-0450

From: Roberta Cordero
To: Atta Stevenson
Cc: Hawk Rosales ; Ken Wiseman ; Megan Rocha ; Melissa Miller-Henson ; Bill Anderson ; Cathy Reheis-Boyd; Cindy Gustafson ; Greg Schem ; Jimmy R. Smith ; Meg Caldwell ; Virginia Strom-Martin
Sent: Tue Mar 02 18:40:47 2010
Subject: Re: Fw: RE: Tribal Field Trip

Hi Atta and Hawk,

Thanks for your comments and concerns. FYI--we had a really nice little visit with Ben Henthorne, his cousin, Richard Smith, and some of their young children. Ben and Richard each shared about the subsistence, cultural and ceremonial events that take place there and all along that part of the coast. What a beautiful place! We were even blessed by having the sun come out after fearing it was going to pour on us all day.

Ben and Richard talked about how the people have been going there for thousands of years how important and precious it is, and how they are teaching their kids the old ways.

The BRTF will be meeting in Ft. Bragg again in July. I'm wondering if you and others would be interested in planning ahead to have a tribal meeting for that visit. I know the BRTF would welcome that. (Ken and Melissa, can we put that into the planning for that trip?)

Atta, thank you and your brothers again for the great time I got to spend with you on Sunday! I can still taste that crunchy seaweed...

Blessings,
Roberta

a h r a

www.albionharbor.org

Albion Harbor Regional Alliance

Mon, March 1, 2010

To: Distinguished Members Blue Ribbon Task Force
Attn: Margaret Caldwell,
Ken Wiseman, Executive Director Ken.Wiseman@resources.ca.gov
Cindy Gustafson Blue Ribbon Task Force (including all members)
Also Mendocino County MLPA Program Facilitator Dr. Jeanine Pfeiffer
jeanine.pfeiffer@gmail.com

From: Tomas DiFiore, Board Member Albion Harbor Regional Alliance
AHRA
POB 122 Albion CA 95410
iamtomas@mcn.org

Re: **California Current Ecosystem-Based Management (CCEBM) initiative:** Advancing the Science for Ecosystem-Based Management U.S. West Coast January 30-31 2008, Santa Cruz CA

The Goal of EBM:
The goal of EBM is to ensure the long-term provision of the ecosystem services that humans want and need. Furthermore, it is now widely recognized that the continued delivery of these services depends on healthy, productive and resilient ecosystems.

"A focus on ecosystem services rather than on EBM *per se* allows us to manage in a way that optimizes the delivery of multiple services, not just within a single sector, but across sectors.

"An Integrated Ecosystem Assessment (IEA), under development by NOAA, is a formal synthesis and quantitative analysis of information about natural and socio-economic factors in relation to specified ecosystem management goals within a defined region. It involves and informs citizens, industry representatives, scientists, resource managers, and policy makers through formal processes and is defined by four key steps: scoping, indicator development, risk assessment, and management strategy evaluation."

"A method under development by the CCEBM Science Advisory Committee, Science to Inform Ecosystem Service Trade-off Analysis (SIESTA), is an approach for achieving the **management strategy evaluation** step of the IEA.

"While there are important scientific advances enabling improved marine management, and important scientific limitations that must be addressed with new research agendas, we should not be discussing science in a "vacuum". There will be a need for a "**procedural map**" for how

to apply science to EBM in the real world."
http://ims.ucsc.edu/ccebm

1) What is the 'procedural map' (EBM) within the context of MPA designation by the MLPAi? Can adaptive management consider humans as integral to ecosystem function and services?

2) How does the **Atlantis ecosystem model** for the California Current authored by Isaac Kaplan influence the MLPA process and monitoring assessments of MPA's?

Current Applications of US West Coast Atlantis Model are:

1. Testing ecological indicators
2. Setting federal (Sanctuary and Fishery Council) management in the ecosystem context **(including state MPAs)**
3. Evaluating effects of Individual Transferable Quotas (ITQs) In the future, we will use Atlantis to evaluate management strategies within Integrated Ecosystem Assessments.

On the CCEBM Steering Committee is Margaret Caldwell – Stanford University;
CCEBM Project 1: Indicators of Fishing Impacts (Kaplan and Levin in press)
For fished species, remove a fixed amount of biomass annually from standing stock.
After 25 years, examine changes in ecosystem structure.

3) What indicators reveal this change?

4) How will this 25 year science parameter affect consideration of **MPA closures** to be re-opened to extractive uses? How does the 5-year monitoring assessment fit in? Will the 5 year IEA lead to re-opening closed areas?

5) Please explain the relevance to MLPA implementation, monitoring, and enforcement, of item #2 of the Atlantis Ecosystem Model Current Applications: Setting federal (Sanctuary and Fishery Council) management in the ecosystem context **(including state MPAs).**

This may include a discussion into interactions between federal (NMS, NMFS, Fishery Councils) and state (MLPA, MLMA) management, MOU's, and proposed procedural roadmaps.

Thank you for your consideration of this concern. 25 year closures present a different social and economic impact assessment than we have prepared for locally in our communities.

Respectfully submitted for consideration to the BRTF on 1. March 2010

Tomas DiFiore
AHRA Board Member

Presented to the MLPA Blue Ribbon Task Force on March 1, 2010

Chuck Eyerly	Marie Fostiak	Bill Knapp	Thad Van Bueren	Judith Vidaver	Sally Grigg
Secretary	Director	Treasurer	Chair	Vice-Chair	Alternate

Westport Municipal Advisory Council

P. O. Box 307, Westport, CA 95488
http://www.westportmac.org

February 25, 2010

MLPA Blue Ribbon Task Force
c/o California Natural Resources Agency
1416 Ninth Street, Suite 1311
Sacramento, CA 95814

Re: External Arrays for MLPA Implementation from Point Arena north to Oregon Border

Dear Task Force and Natural Resources Agency:

The Westport Municipal Advisory Council would like to provide preliminary comments on the cited topic in behalf of the citizens living in our sphere of influence from the Ten Mile River north beyond Rockport. We comprise a Council appointed by the Mendocino Board of Supervisors to convey local opinion on planning issues and other related matters.

At a meeting held February 22, 2010 the Westport MAC received public input on the MLPA process and agreed by a unanimous vote that we would like to ensure shore-based sport and subsistence fishing and intertidal resource collection is not further restricted by the MLPA process in the following critical sections of our local coastline as shown on the attached map:

1. Between 39°35'27"N (Kibesillah) and 39°36'30"N (Bruhel Point)
2. Between 39°38'04"N (south end of Westport) and 39°41'12"N (Union Landing Vista Point)

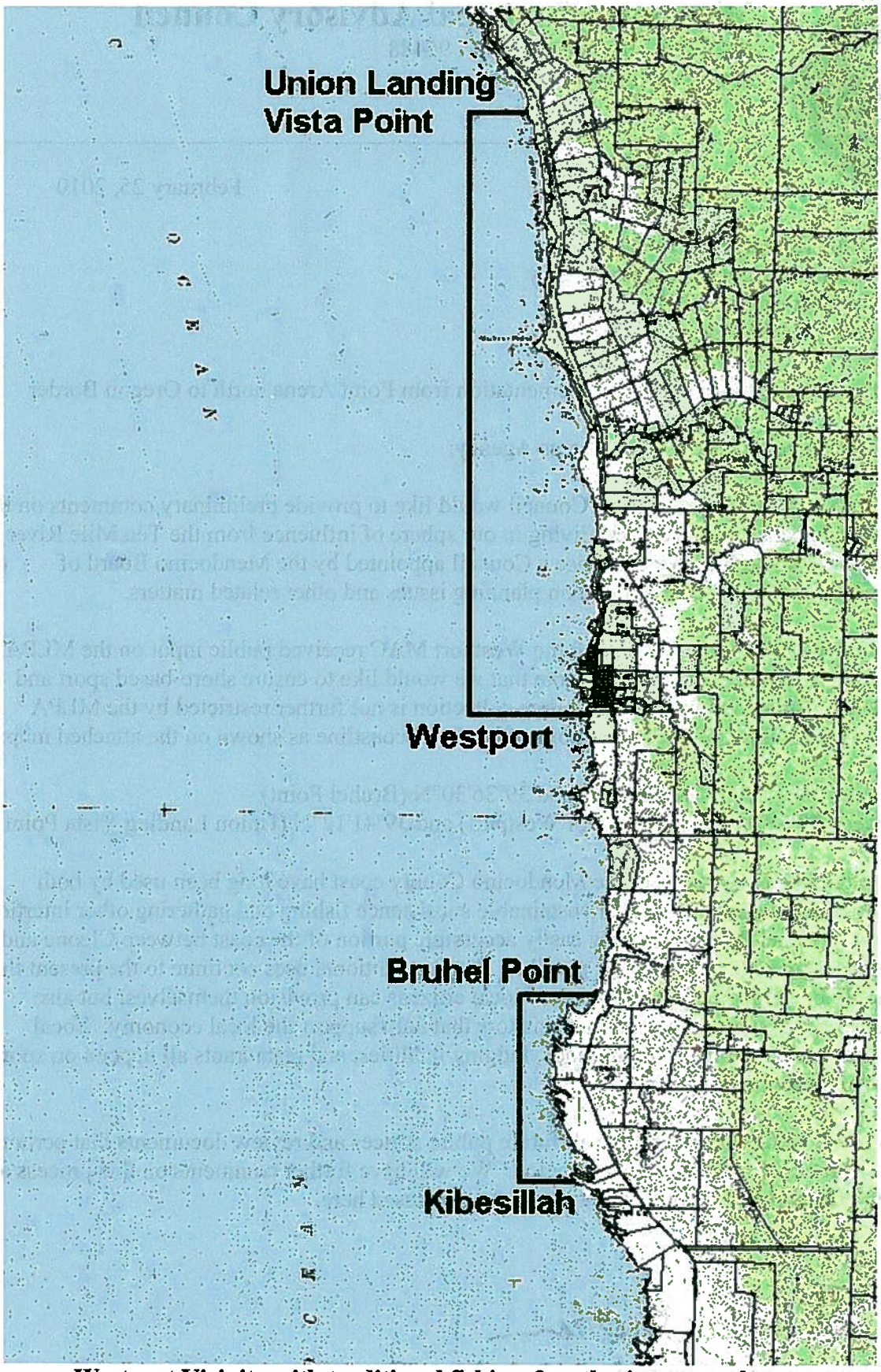
The two referenced portions of the Mendocino County coast have long been used by both indigenous and modern people for sustainable subsistence fishing and gathering other intertidal resources. Bruhel Point is the only easily accessible portion of the coast between Cleone and Westport where such activities are possible. Those traditional uses continue to the present time and should be retained not only to ensure local citizens can provision themselves; but also because that traditional access attracts visitors that help support the local economy. Local businesses such as stores, campgrounds, lodging facilities, and restaurants all depend on sport fishers for a portion of their income.

The WMAC would like to receive all future public notices and review documents that pertain to the cited process for the north coast region. We will have further comments on this process as it unfolds. Thank you for considering the views expressed here.

Sincerely,

Thad M. Van Bueren

Thad M. Van Bueren, Chairman



Westport Vicinity with traditional fishing & gathering areas shown.

March 1, 2010
To: Distinguished Members of Blue Ribbon Task Force

From:
Terry Nieves, Owner- Ocean Harvest Sea Vegetable Company
Board Member- Albion Harbor Regional Alliance

My name is Terry Nieves, Wild Ocean Food Provider and resident of Mendocino County. I'm speaking today about 2 important issues I believe you should know about.

The first issue is the health, nutritional and medicinal values of wild edible seaweeds. They contain more trace minerals than any land plants, including iodine 127. Iodine is sorely missing from the diets of those who partake in the Standard American Diet (SAD) diet, which is a leading cause of our obesity epidemic in this country. If one is Iodine 127 deficient, any iodine 131 (radioactive iodine) we breathe or get on our skins is likely to be absorbed. Iodized table salt is not the answer to iodine, if you have high blood pressure; you know that you cannot eat iodized table salt. Wild edible iodine sources are necessary for our health. Seaweeds are eaten for their health benefits by vegans, carnivores, raw foodists, people who practice macrobiotic cooking and many people others. Wild seaweeds are eaten for their medicinal benefits. Seaweeds are able to bind with and remove heavy metals from our bodies- a miracle in my opinion! There are few land plants and man made substances that have this ability. Wild foods are our birthright and as a Wild Ocean Food Provider, I choose to live a "right livelihood" in harmony with the abundance of the ocean.

The second issue I want to bring to your attention is the wisdom and commitment of our local community, to preserve for all time, the culture we came here to live within and protect. The ocean's bounty is connected to our majestic redwood forests. My neighbors and I know that. We live with these elements referred to as "resources" by some in the cash economy. They are our home.

We feel a responsibility to care for our precious home in our work and play. The ocean is my office. I have learned through all of my senses to experience the ebb and flow, know the balance or imbalance my actions or those of others might contribute to. Therefore, I ask you to honor the wisdom and commitment of our local community and hold it in high esteem as you make decisions that affect our lives as they are intertwined with the ocean. The north coast fisheries are a healthy, productive part of our culture. They are protected by those of us who do care about health and the health of the oceans.

I invite you, either tomorrow, or when you return in July to come with me on a seaweed harvest, so you may experience the ocean as we do. I promise you will not be disappointed.

Thank you,

Terry Nieves

Presented to the MLPA Blue Ribbon Task Force on March 1, 2010

Wording Developed for Tribal Section of North Coast Local Interest Workgroup's External MPA Array

Prepared by Smith River Rancheria (Tolowa), Yurok Tribe, and

InterTribal Sinkyone Wilderness Council

January 29, 2010

Tribal Indigenous Peoples have inhabited the Pacific North Coast since time immemorial and continue to rely on the coast and the ocean for a variety of customary uses, including but not limited to subsistence harvesting and gathering of marine life; and spiritual, ceremonial and other traditional cultural activities. These uses and activities are undertaken pursuant to aboriginal rights founded in federal law, which the State of California is obligated to respect and protect. As an intrinsic part of the ecosystem, Indigenous Peoples have been and continue to be responsible stewards of the environment. Traditional ecological and cultural knowledge forms the basis of sustainable management by Indigenous Tribal peoples of the North Coast Region. Due to the nature, methods, and amounts harvested, the take of marine species by Indigenous Peoples is minimal.

Each of the North Coast Tribes is a distinct sovereign nation and each has identified certain areas in the North Coast Region where traditional customary uses and cultural activities are carried out. Furthermore, each federally-recognized Tribal Nation retains a government-to-government relationship with the Federal government. In implementing the MLPA, the Initiative should likewise engage in government-to-government consultations to address Tribal concerns. There are also federal trust responsibilities that are based on the unique legal relationship between the United States and recognized Indian Tribes. In the spirit of these responsibilities, the State of California should ensure that the preferred alternative for MPAs in the North Coast Region contains provisions recognizing and protecting traditional customary and cultural uses of Indigenous Peoples in the areas identified as such by the Tribes. Sustainable harvesting and gathering is a key principle in cultural and ecological preservation, and it is fully consistent with the goals and purposes of the Marine Life Protection Act. Moreover, as Tribes in California have never ceded their aboriginal rights to continue to harvest and gather from the marine environment, the State should recognize those uses and ensure that the regulations adopted as part of the MLPA process do not infringe upon them in any manner, unless expressly authorized by the affected Tribe.

March 1, 2010

A Modest MPA Proposal (with Apologies to Jonathan Swift)

Submitted by Judith Vidaver POB 25 Fort Bragg CA 95437

A major criticism of the MLPA is that it restricts only fishing, but does not address other impacts to marine resources such as water pollution, development, and ocean industrialization.

Of concern to some is that implementation of the MLPA will somehow lead to oil/gas drilling or make it easier for other forms of industrialization of the ocean by projects such as wave/wind power, fish farms, seabed mining, etc. All of which the Federal government is planning on zoning and promoting.

The California State Attorney General (AG), Jerry Brown, has possibly provided a way for us to address these concerns.

On September 25, 2009 the AG wrote a "letter of opinion" to the Asst. Secretary for Ocean and Coastal Policy of the Natural Resources Agency. The letter addresses a number of issues regarding MPAs including whether it is necessary to specifically identify what uses are allowed or prohibited in SMCAs. In the AG's opinion:

"The designating or managing agency may identify prohibited recreational and commercial activities that would compromise protection of the species of interest, natural community, habitat, or geological features or it may identify allowable uses within marine conservation areas."

SMRs already prohibit any kind of activities in addition to fishing that may cause harm. So, to protect SMCAs from destructive activities such as sewage treatment plants, oil drilling, fish farms etc. all we have to do is include such prohibitions in the language of the arrays.

Keep in mind that though California has a ban on offshore oil drilling in State waters, there is strong pressure to expand current allowable drilling. If the Federal government decides to open up the Point Arena Basin, SMRs and SMCAs with specific language prohibiting oil drilling may discourage potential leasees.

So my proposal is this: include prohibitions of all potential industrialization of the ocean in the language of the individual MPAs. PLUS create a SMCA covering all other areas not included in the final North Coast array. This "blanketing" SMCA would specifically list all current uses as allowed and specifically prohibit all other uses that could harm the marine ecosystem.

The Northern California marine ecosystem has been recognized as one of the four most productive on earth. We have a charge to protect it. In protecting our ocean we will protect ourselves.

John and Barbara Stephens-Lewallen
Mendocino Sea Vegetable Company
Box 455, Philo,CA 95466
(707)895-2996 fax 895-3270
<www.seaweed.net>

To: Cindy Gustafson, Chair, and members, MLPAI Blue Ribbon Task Force, Fort Bragg, March 1, 2010
From: John and Barbara Stephens-Lewallen, Public Ocean Access Network

Stop the Marine Life Protection Act Initiative Now!

Dear friends on the Blue Ribbon Task Force,

It is our duty to defend California ocean food sovereignty while we still draw breath. Public access to fisheries is a Constitutional right in California (Article 1, Section 25). We will lose this right unless we unite and assert it this year.

You and the interests you represent would be wise to help us stop the Marine Life Protection Act Initiative (MLPAI). The MLPAI is a lose/lose/lose effort on California's North Coast, benefitting only the careerists who run the MLPAI process.

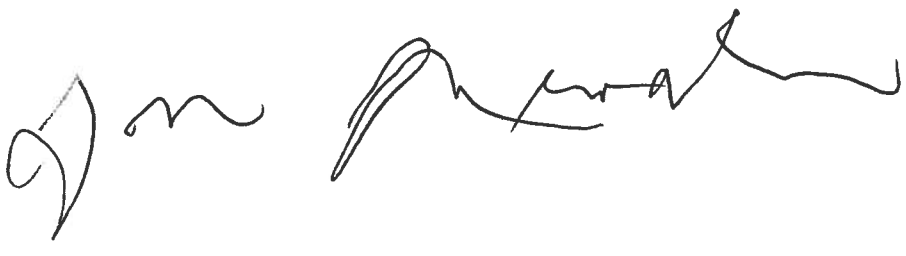
The Resources Legacy Fund Foundation (Foundation) and its backers will never make sustainable and respected fisheries regulations here. The Foundation will need to become more brutal and uglier in this futile effort.

Cindy Gustafson, please lead the Blue Ribbon Task Force in asking the Foundation and the Governor to face the fact that the MLPAI should be stopped for the good of all. This can be done by withdrawing from the Memorandum of Understanding (MOU) giving all power over the MLPAI to the Foundation.

The Foundation-run MLPAI process is corrupt and deceptive from top to bottom, and will be challenged in every way if left to stand.

Cancel the MOU giving private foundations control over California's government and public fisheries!

Stop the Marine Life Protection Act Initiative Now!



Presented to the MLPA Blue Ribbon Task Force on March 1, 2010

Recommended Approach to Protecting Traditional Indian Uses of Marine Resources and Areas in the Development of Marine Protected Areas

Submitted by the InterTribal Sinkyone Wilderness Council

February 22, 2010

In implementing the Marine Life Protection Act, the MLPA Initiative should be guided by the following policy with regard to the rights and interests of Indian Tribes in the North Coast Region. The policy should be promulgated and adopted through government-to-government consultation with Indian Tribes in the North Coast Region.

1. The Initiative shall acknowledge that Indian Tribes have aboriginal rights to take marine resources and to use and manage coastal areas for traditional subsistence, cultural, religious, ceremonial, and other customary purposes.

2. Traditional uses of marine resources and areas by Indian Tribes are consistent with the conservation and restoration goals of the Marine Life Protection Act.

3. The development and adoption of Marine Protected Areas (MPAs) should exclude Indian Traditional Use Areas as delineated by Indian Tribes in consultation with the Initiative.

4. If there is compelling biological evidence for the adoption of an MPA which would overlap an Indian Traditional Use Area, the regulations implementing the MPA should include provisions acknowledging the right of Indian Tribes to continue to take marine resources and to use the area subject to the MPA for traditional subsistence, cultural, religious and ceremonial purposes.

Legal and Factual Rationales in Support of MLPA Policy Acknowledging Traditional Indian Uses

This policy proposed by the InterTribal Sinkyone Wilderness Council is supported by the following reasons:

1. Aboriginal Rights

The State is obligated to respect traditional Indian uses because they are carried out pursuant to aboriginal rights protected by federal law. Aboriginal rights derive from long and continuous use of land, water and resources. The Indian Tribes in the North Coast Region satisfy this legal standard. Both the Tribes and their members have paramount aboriginal rights. Such rights are enforceable until they have been voluntarily conveyed to the United States, abandoned or expressly extinguished by federal statute. The aboriginal rights at issue here have never been relinquished, abandoned or extinguished. Even for those Tribes that accepted compensation from the Indian Claims Commission for the loss of ancestral lands, aboriginal rights were not extinguished because the effect of that decision was limited to lands within State boundaries, which at the time did not include the three-mile zone now subject to the MLPA. *United States v. California,* 381 U.S. 139 (1947) (State of California had no title to or property interest in the Pacific Ocean lying seaward of the ordinary low water mark on the coast of California extending seaward three nautical miles).

2. Indian Sovereignty

Traditional Indian uses should be protected in deference to the sovereignty of Indian Tribes, which extends to their members wherever located. The inherent right of Indian Tribes to self-government predates the formation of the United States and the State of California. One of the earliest decisions of the United States Supreme Court characterized Indian Tribes as "distinct, independent political communities, retaining their original natural rights, as the undisputed possessors of the soil, from time immemorial . . . .[W]ithin their boundary, [Tribes] possessed rights with which no state could interfere." *Worcester v. Georgia,* 31 U.S. 515, 559-560 (1832) (ruling that the laws of Georgia can have no force within Indian country). This is the law of the United States today. *United States v. Enas,* 255 F.3d 662, 666 (9th Cir. 2001) (Indian Tribes are "autonomous sovereigns" and their inherent authority comprises the power to control their internal relations and to preserve their "unique customs and social order."). An unbroken line of federal judicial decisions confirms that Indian Tribes have sovereign authority over their members, and that this authority extends beyond the boundaries of Indian reservations. *See, e.g., United States v. Mazurie,* 419 U.S. 544, 557 (1975) (Indian tribes retain attributes of sovereignty over both their members and their territory). *White Mountain Apache Tribe v. Bracker,* 448 U.S. 136 (1980) (the right of Indian tribes to make their own laws applicable to their members is an independent barrier to the exercise of state jurisdiction). Under these circumstances, the Tribal sovereignty doctrine does not entirely preempt the State's authority in the three mile zone. Rather, the fact that Tribal

members carry out traditional fishing, gathering and other cultural activities there under the auspices of their Tribal governments and pursuant to Tribal laws strongly favors a State policy which avoids interference with such uses.

3. Protection of Indian Culture

Denial of traditional Indian uses will harm Indian culture by depriving Indian people of the right to engage in activities that are part of their Indian identity. Fishing and gathering by Indian people in the areas targeted for potential Marine Protection Areas are not carried out solely to meet subsistence needs, although that is an important aspect of these activities. Indian use of these areas has an important cultural component that distinguishes such uses from those of other stakeholder groups. If Indian people are denied the use of traditional ceremonial and gathering areas along the coast, an essential part of their identity and heritage will be lost forever. The resources on which Indian people rely for their cultural activities are not fungible. In some cases, these areas may be the only places certain resources are available. Tribal laws require use of particular resources for specific purposes. Nor may the locations of such cultural activities be changed without destroying the meaning of the ceremony or event. Some of the ceremonies are tied to stories and events that occurred in only that place. That is why it is often said that Indian culture is place-based. Overall, closure of traditional use areas will irreparably harm Indian culture in the North Coast Region. The best way to explain the importance of these areas is to say that their closure would be viewed as an act of forced assimilation, as the destruction of something that makes the participants uniquely Indian.

4. Avoidance of Adverse Health Effects

Denial of traditional Indian uses will cause adverse health effects for Indian people who rely on marine resources for food and medicine. Many Indian people rely for food and medicine on seaweeds, shellfish and other marine resources harvested from traditional use areas within the North Coast Region. Closure of these areas or restricted access to them as part of an MPA will result in severe health repercussions. Traditional foods and medicines are essential parts of the diet and way of life of Indian people. In light of the fact that Tribal communities are now faced more than ever with high rates of diabetes, hypertension, obesity, and other health problems, these traditional foods and medicines are an increasingly important part of the path to healthy Indian communities. Traditional marine foods and medicines in many cases may be the only element of Indian peoples' diets that keeps disease rates from growing even higher.

5. Minimal Impacts

Protecting traditional Indian uses has had, and will continue to have, minimal impacts on the biological condition of marine resources. The small number of people exercising aboriginal use rights and the management systems Indian people have followed for generations will ensure that the impacts will be minimal. Many Indian families continue to maintain intricate and sophisticated methods of stewardship that prescribe when and

how they may use marine resources. These systems address species, amounts that can be taken, the methods of harvest, time of year, time of day, specific locations, and the current health and density of the species. Young people are selected by elders who teach them methods of harvesting and the prayers and songs that go with these harvests. Typically, many areas are harvested in rotation, sometimes being left alone for several seasons to increase the health and abundance of their plant and animal habitats and populations. A good example is the methodology for the harvest of seaweeds. Traditional harvesters always cut the seaweeds above the root systems—never scraping away the seaweeds' roots from the rocks, as many commercial harvesters do. Scraping the seaweeds from the rocks kills the plant, and it may take many years for it to become reestablished. There are social strictures and disciplines that are often applied to Tribal members who harvest too much of one thing at a time. This form of self-regulation helps assure that no particular species is harvested beyond the point of sustainability. This ancient type of scientific knowledge is at least as valid as so-called western science's developing approaches to managing marine resources responsibly. In fact, the traditional ecological knowledge utilized by the Tribes' in their stewardship and use of marine resources provides tremendous benefits to the health, abundance, and biological diversity of these species. The system of interaction between marine resources and Indian people is informed by their cosmology and systems of spiritual belief. For these resources to be available for future generations of Indian peoples, it is understood that they have to be taken care of in the right way. People are taught that they should only take what they and their families need and that if they use this restrained approach to respecting and utilizing the resources, then the resources will always be there to provide health and well being for their people. This principle too guards against overuse and degradation of the resource.

6. Indian Religious Practices

Additional restrictions on traditional Indian uses would interfere with Indian religious practices. There are areas within the North Coast Region where Indian religious ceremonies or activities are regularly held. Closure of these areas under an MPA regime or burdensome restrictions on use will destroy or interfere with these religious practices. The obligation to respect Indian religious practices may be found in Article I, section 4 of the California Constitution, which guarantees the "[f]ree exercise and enjoyment of religion . . . ." and in the First Amendment of the U.S. Constitution, which likewise guarantees the free exercise of religion, as made applicable to state governments under the Due Process Clause of the Fourteenth Amendment. Additional authority is found in the Religious Freedom Restoration Act, which prohibits the federal and state governments from "substantially burden[ing] a person's exercise of religion even if the burden results from a rule of general applicability . . . ." 42 U.S.C. § 2000bb-1(a). Such burdens are justified only by a "compelling governmental interest" and then only if the government action chosen is the "least restrictive means" of accomplishing the compelling interest. 42 U.S.C. § 2000bb-1(b). No such compelling governmental interest can be identified here, especially because Indian traditional cultural uses are entirely consistent with the goal of the Marine Life Protection Act to protect and preserve marine resources along the coast.

7. Socioeconomic Impacts

Prohibiting traditional Indian uses would cause unjustifiable socioeconomic impacts in violation of the Marine Life Protection Act. The Marine Life Protection Act requires the Initiative to consider socioeconomic impacts in implementing the Act. Section 2853 establishes the goal of sustaining, conserving and protecting marine life populations, including those of economic value. The Department of Fish and Game is obligated to consider "relevant information from local communities" in carrying out the requirement to evaluate the "[s]ocioeconomic and environmental impacts of various alternatives." Section 2855(c)(2). The Department has indicated it will "undertake an analysis of the maximum anticipated economic impact of the preferred alternative it proposes to the California Fish and Game Commission." Memorandum from MLPA Initiative Staff to MLPA Blue Ribbon Task Force, January 13, 2006. To be sure, the marine resources along the coast on which Indian people rely have value far beyond the economic sphere, and denying access to such resources will cause incalculable damage to Tribal cultures. But denial of access will also have severe economic impacts, in that many Indian people rely on these resources for food for themselves and their families. The Marine Life Protection Act requires the Initiative to identify, evaluate and take into account the "socioeconomic" impacts on Indian Tribes and their members. The impacts to Tribal communities should be evaluated separately from those to other communities along the coast. We note that in the Central Coast Region, it appears that no Indian Tribes were interviewed with regard to socioeconomic impacts. Memorandum from MLPA Initiative Staff to MLPA Blue Ribbon Task Force, January 13, 2006 (noting interviews with commercial fishermen, divers, kayakers, and recreational fishers, and literature review of the economic value of whale watching, scuba diving and recreational fishing). The same mistake should not be made here.

8. Federal Policy

Protecting traditional Indian uses would bring the State's policy in line with federal policy, which acknowledges Indian rights to harvest species for cultural purposes as consistent with conservation goals. For example, the regulations implementing the Endangered Species Act, the most restrictive federal statute in this area, allow Indian Tribes to harvest species protected by the Act if such take is carried out pursuant to approved conservation plans. The National Marine Fisheries Service (NFMS) has adopted a rule which exempts the taking of listed salmon and steelhead from the prohibitions of the Act where the activity is undertaken by "a tribe, tribal member, tribal permittee, tribal employee or tribal agent" in compliance with a Tribal resource management plan approved by the Secretary of Commerce. 50 C.F.R. Part 223 (2000). NMFS's action is based on recognition of the fact that Indian Tribes are responsible stewards and managers of marine and anadromous species. Acknowledging Indian traditional uses in the MLPA areas is fully consistent with this federal policy on conservation of natural resources and endangered species.

Marine Life Protection Act

- **10 years since signed into law.**
- **Many fishing regulations developed since that time. These have not been shown as a part of the MPA program in other regions. Please show these for the North Coast, in addition to designated MPAs. That will provide a true picture of controls on fishing, both commercial and sport.**
- **California has a serious budget problem, and funds to advertise, manage and enforce MPAs are not available. Refer to CA Air Resources Board action to defer enforcement of diesel engine retrofits because of economic factors.**

Marine Life Protection Act Initiative

- **Overwhelming amount of publications, meeting notices, error corrections and constraints.**
- **Staff works very hard, but there are constant errors. Short notice for meetings; corrections to phone access numbers, very large documents to review for meetings within hours, exclusion of the public from MLPAI social events – Samoa Cookhouse event, deviation from published process.**
- **North Coast groups formed within a short time and provided eight "external arrays" for suggested MPAs. Several of these are nearly the same – PLEASE DIRECT YOUR ATTENTION TO THESE. One was developed without any consideration for local economic effects, by the purpose of the group.**
- **North Coast groups have made a serious effort to apply the MLPA, no matter their objections to the law and the process. A major problem faced by the Blue Ribbon Task Force is the MLPAI insistence that public meeting laws need not be followed. You have a failure of public trust due to this factor.**
- **All of the effort locally is in a shadow of a huge adverse effect at the City of Point Arena. During the North Central Coast assignment of MPAs by the Fish and Game Commission, an MPA was placed that will have a severe economic effect on that city and area. The locals had proposed an alternative, titled "2XA", I believe, but that was rejected. I am told that applying the science, habitat and practical factors that are supposed to be a standard for judging MPAs, 2XA was superior to the actual adoption.**

Councilmember Jere Melo
City of Fort Bragg
March 2, 2010

NOYO HARBOR DISTRICT
A California Port District
19101 S. Harbor Drive
FORT BRAGG, CA 95437
707-964-4719

February 16, 2010

California Marine Life Protection Initiative
Resources Agency
1416 Ninth St.
Suite 1311
Sacramento, CA 95814

Re: Commercial Fishing Representation on the
North Coast Regional Stakeholder Group

Ladies and Gentlemen:

The Noyo Harbor Commission, at its regular February, 2010, meeting, resolved to contact you and strongly request additional representation on the North Coast Regional Stakeholder Group for commercial fishing interests in Mendocino County.

The Noyo Harbor Commission heard angry complaints from the public to the effect that an historically significant stakeholder group, Mendocino County commercial fishing, was not adequately represented on the North Coast Stakeholder Group.

There was considerable support for the appointment of Tom Estes, Sr. to the Stakeholder Group. We do not understand why he was not appointed, and while the Noyo Harbor Commission appreciates the appointment of James Bassler from the Salmon Trollers Marketing Association to the Stakeholder Group, the Noyo Harbor Commission requests the appointment of Mr. Estes or another representative of Mendocino County commercial fishers to the Stakeholder Group.

There is substantial opposition in Mendocino County to the current composition of the Stakeholder Group and while the Noyo Harbor Commission has no complaints about those already selected, more representation is needed from the Mendocino County commercial fishing community to assure public acceptance of the process.

Thank you for your attention to this request. If the Noyo Harbor District can be of any assistance, please do not hesitate to contact us.

Very truly yours,

Robert D Armitage

Robert Armitage
Chair
Noyo Harbor Commission

From: Tomas DiFiore
Sent: Thursday, February 25, 2010 11:30 AM
To: MLPAComments; Melissa Miller-Henson; jeanine.pfeiffer@gmail.com; mlpa_iteam@lists.resources.ca.gov; mike carpenter; Kevin Mc Grath; Bruce Campbell
Subject: North Coast SAT_LOP connectivity allele models concerns_02252010

02/25/10

Additional comments to:

MLPA Master Plan Science Advisory Team North Coast 'Study' Region

Re: February 11, 2010 webinar meeting – specifically Goals 1,2 4,6 and external arrays now in round2 and the upcoming round3.

Concerns and comments re: size and spacing, connectivity and allele population fluctuation dynamics, LOP designations decision tree of and allowed uses including re-classification of ALL seaweeds and algae.

From: Tomas DiFiore

iamtomas@mcn.org

Albion Harbor Regional Alliance

POB 122 Albion CA 95410

To: North Coast Science Advisory Team

MLPAComments@resources.ca.gov

Marine Life Protection Act Initiative fx 916-653-8102

c/o California Natural Resources Agency

1416 Ninth Street, Suite 1311

Sacramento, CA 95814

Distinguished members of the California Marine Life Protection Act Initiative Master Plan Science Advisory Team. Once again I must apologize but I think continued discussion has relevant importance to North Coast Marine planning (MPA's & EBM, adaptive management, replication guidelines, bio-economics) and human impacts that are assumed according to levels of commercial and/or subsistence and recreational harvest methods of Edible Seaweed and Sea Vegetables, Edible Algae and Edible Bull Kelp.

These additional comments follow the 02 11 2010 comments I submitted to the SAT and which presented on pages 8, 9, and 10 - four questions which were preceded by specific source data for comparisons of theory and practice. I Thank You All in earnest and applaud your decision to make the LOP decision tree MPA specific and a living document along with the North Coast Regional Profile document.

This document poses 7 concerns and contains 18 pages including this cover page.

First question is on bottom of p11.

Thank you all Science Team Members

Respectfully Submitted
Tomas DiFiore
Albion Harbor Regional Alliance
Commercial Seaweed Harvester
Ocean Harvest Sea Vegetable Company

02/25/10
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Albion Harbor Regional Alliance
POB 122 Albion CA 95410

To: North Coast Science Advisory Team

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First question is on bottom of p11.

The Evolution of NC 'Study' Region LOP Designations and Decision Trees - excerpts from:

California Marine Life Protection Act Initiative Draft Methods Used to Evaluate MPA Proposals in the MLPA South Coast Study Region Draft Revised September 25, 2009

and the
California Marine Life Protection Act Initiative *Draft Levels of Protection in the North Coast Study Region Revised December 10, 2009*

and the
Briefing Document C.1: Evaluation Methods for the MLPA South Coast Study Region: Updates to Chapter 3 - Protection Levels (Draft revised)

SAT briefing document, agenda_100609c1.pdf was cited in comments made on 02 11 2010.

Allowed Use: **Giant kelp (hand harvest)**

LOP Designation: MODERATE

Does proposed activity alter natural habitat directly?
NO doesn't damage the substrate, per se

Is abundance of any species likely to be significantly different in the MPA relative to an SMR?
YES - kelp doesn't move

Is habitat alteration likely to change community structure substantially?

Is removal of any species likely to impact community structure directly or indirectly?

Is removal of any species likely to directly alter habitat?
YES - kelp canopy FORMS habitat (notably for the juveniles of commercially important fish), so removing it removes habitat.

Is habitat alteration caused by species removal likely to change community structure substantially?
NO - under current technology and spatial harvest methods, hand harvest results in only patchy removal of surface kelp canopy which likely does not substantially alter community structure.

Is the altered abundance of any species likely to alter community structure substantially?

Allowed Use: **Giant kelp (mechanical harvest)**

LOP Designation: LOW

Does proposed activity alter natural habitat directly?
NO - doesn't damage the substrate, per se

Is abundance of any species likely to be significantly different in the MPA relative to an SMR?
YES - kelp doesn't move.

Is habitat alteration likely to change community structure substantially? N/A

Is removal of any species likely to impact community structure directly or indirectly? N/A

Is removal of any species likely to directly alter habitat?
YES - kelp canopy FORMS habitat (notably for the juveniles of commercialy important fish), so removing it removes habitat.

Is habitat alteration caused by species removal likely to change community structure substantially?
YES - kelp provides structure for a rich and unique community, removal by mechanical harvest extends deeper than hand harvest and removes broad swaths of canopy, changing community structure substantially.

Is the altered abundance of any species likely to alter community structure substantially? N/A

Allowed Use: **Marine algae other than giant and bull kelp (hand harvest)**

LOP Designation: LOW

Does proposed activity alter natural habitat directly?
NO - doesn't damage the substrate, per se.

Is abundance of any species likely to be significantly different in the MPA relative to an SMR?
YES - kelp doesn't move.

Is habitat alteration likely to change community structure substantially? N/A

Is removal of any species likely to impact community structure directly or indirectly? N/A

Is removal of any species likely to directly alter habitat?
YES - All marine algae form habitat, so removing it removes habitat.

Is habitat alteration caused by species removal likely to change community structure substantially?
YES - marine algae provide structure for a rich and unique community, removal has the potential to change community structure substantially.

Is the altered abundance of any species likely to alter community structure substantially? N/A

Allowed Use: Canopy forming algae

[*Alaria spp.* (Wakame), *Lessonioposis littoralis* (Ocean Ribbons), *Laminaria spp.* (Kombu), *Saccharina/Hedophyllum sessile* ('Sweet' Kombu), *Egregia menzeisii* (Feather Boa) and *Fucus spp.* (Bladder wrack or Rockweed)] (hand)

LOP Designation LOW

Does proposed activity alter natural habitat directly?
NO

Is abundance of any species likely to be significantly different in the MPA relative to an SMR?
YES all species are sessile.

Is habitat alteration likely to change community structure substantially? N/A

Is removal of any species likely to impact community structure directly or indirectly? N/A

Is removal of any species likely to directly alter habitat?
YES

Is habitat alteration caused by species removal likely to change community structure substantially?
Yes - These species form important habitat for a variety of organisms.

Is the altered abundance of any species likely to alter community structure substantially? N/A

The 02 10 2010 document G2 Chapter 3, Protection levels (Goals 1, 2, 4, 6,) showed
California MLPA Master Plan Science Advisory Team
Methods Used to Evaluate MPA Proposals in the MLPA North Coast Study Region (DRAFT)
Chapter 3 and Appendix A– Protection Levels (Goals 1, 2, 4 and 6)
Draft revised February 10, 2010

1) *Allowed Use 2) LOP 3) Does proposed activity alter natural physical habitat directly?*

4) Is abundance of any species in natural habitat likely to be substantially different in the MPA relative to an SMR?

5) Is habitat alteration likely to change community structure substantially?

6) Is removal of any species likely to impact community structure directly or indirectly (e.g. size structure)?

7) Does any removed species form biogenic habitat that would be substantially altered by removal?

8) Is the altered abundance of any species likely to alter community structure through species interactions?

9) Is habitat alteration caused by species removal likely to change community structure?

10) Substantial change in community structure?

Re: 1,2,3,4,7,9,10 **#1 is the allowed use** such as Bull Kelp (hand harvest) **#2 is the LOP** Low

Bull kelp (hand harvest) **Low**
NO - doesn't damage the substrate, per se
YES - bull kelp is sessile and harvest reduces reproductive potential
YES - bull kelp forms habitat, so removing it removes the habitat. Bull kelp may be more susceptible to negative population impacts of harvest due to its reproductive and life history characteristics
YES - bull kelp beds are associated with a unique community, removing them changes community structure
YES - substantial change

Sea palm (intertidal hand harvest) **Low**
NO - doesn't damage the substrate, per se
YES - sea palms are sessile and harvest reduces reproductive potential
YES - sea palms form habiatat and do not easily disperse to areas from which they have been removed
YES - sea palms create a unique habitat that supports a diverse community assemblage
YES - substantial change

Turf algae (intertidal hand harvest) **Moderate**
[*Porphyra spp.* (Nori, Laver),
Ulva spp. (Sea Lettuce), *Chondrocanthus/Gigartina exasperata* (Turkish Towel) and *Mastocarpus spp.* (Mendocino Grapestone)]

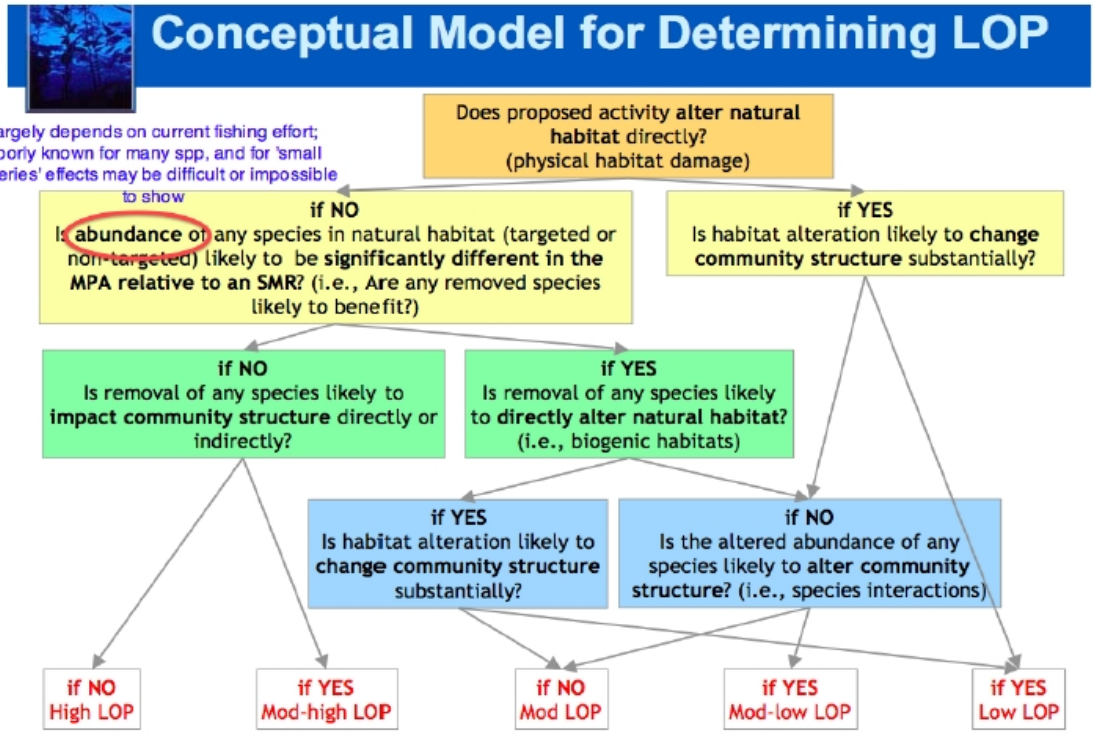
NO - doesn't damage the substrate, per se
YES - all species are sessile
NO - Does any removed species form biogenic habitat that would be substantially altered by removal?
NO - Though these species provide some habitat for small organisms, they do not form substantial canopies and thus their removal is unlikely to substantially alter community structure. *Is the altered abundance of any species likely to alter community structure through species interactions?*

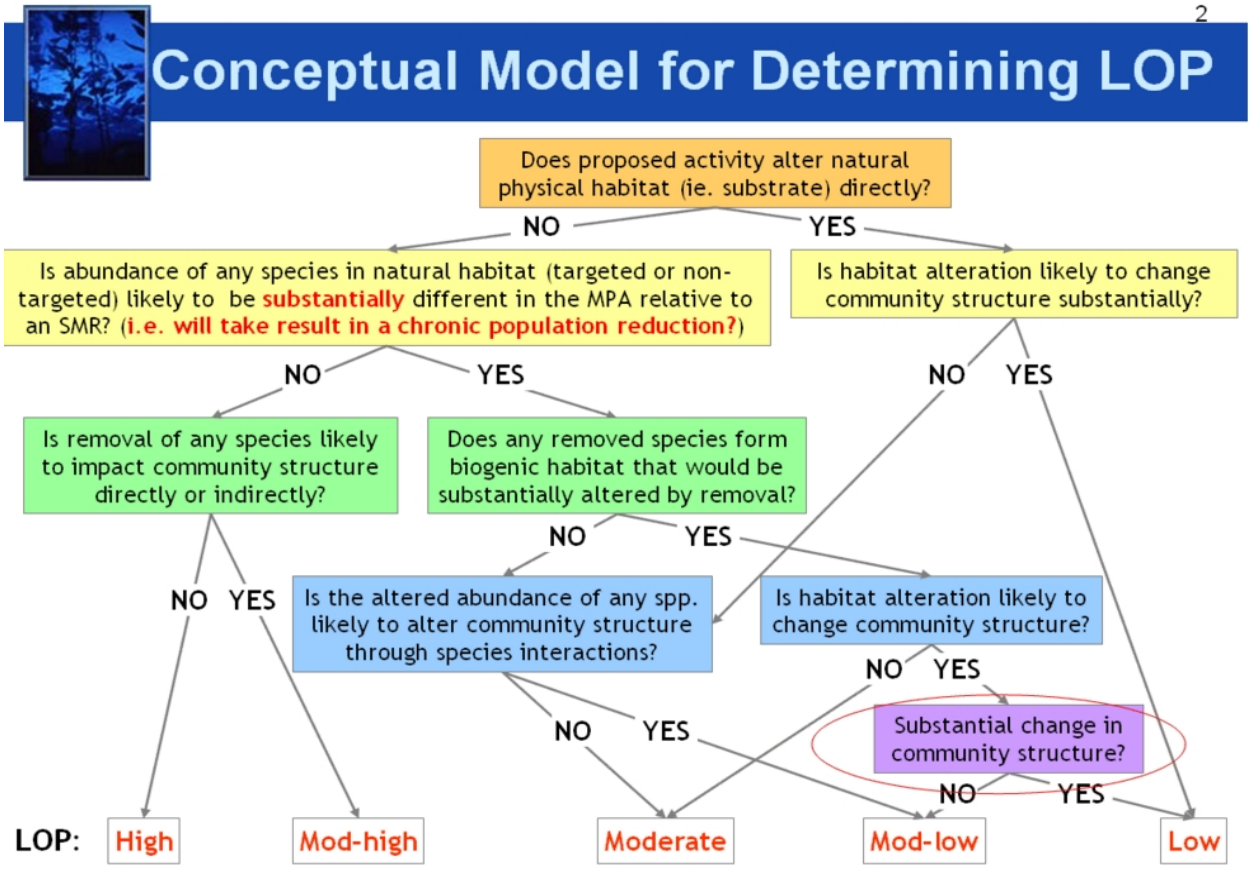
Canopy forming algae (intertidal hand harvest) **LOW**
[*Alaria spp.* (Wakame), *Lessonioposis littoralis*.
(Ocean Ribbons), *Laminaria spp.* (Kombu), *Saccharina/Hedophyllum sessile* ('Sweet' Kombu), *Egregia menzeisii* (Feather Boa) and *Fucus spp.* (Bladder wrack or Rockweed)]

No
Yes - all species are sessile.
YES
YES - These species form important habitat for a variety of organisms.
YES

After the LOP designation, the quantifiers are grouped into 5 orders.
ORDER 1 3
ORDER 2 4, 5
ORDER 3 6, 7
ORDER 4 8, 9
ORDER 5 10

The SAT, North Coast, 17 Dec 2009 Conceptual Model for Determining LOP is at the top of the next page followed by the revised document shown during the 11 Feb 2010 webinar:


Conceptual Model for Determining LOP
largely depends on current fishing effort; poorly known for many spp, and for 'small fisheries' effects may be difficult or impossible to show
Does proposed activity alter natural habitat directly? (physical habitat damage)
if NO
Is abundance of any species in natural habitat (targeted or non-targeted) likely to be significantly different in the MPA relative to an SMR? (i.e., Are any removed species likely to benefit?)
if YES
Is habitat alteration likely to change community structure substantially?
if NO
Is removal of any species likely to impact community structure directly or indirectly?
if YES
Is removal of any species likely to directly alter natural habitat? (i.e., biogenic habitats)
if YES
Is habitat alteration likely to change community structure substantially?
if NO
Is the altered abundance of any species likely to alter community structure? (i.e., species interactions)
if NO
High LOP
if YES
Mod-high LOP
if NO
Mod LOP
if YES
Mod-low LOP
if YES
Low LOP


2
Conceptual Model for Determining LOP
Does proposed activity alter natural physical habitat (ie. substrate) directly?
NO
YES
Is abundance of any species in natural habitat (targeted or non-targeted) likely to be substantially different in the MPA relative to an SMR? (i.e. will take result in a chronic population reduction?)
Is habitat alteration likely to change community structure substantially?
NO
YES
NO
YES
Is removal of any species likely to impact community structure directly or indirectly?
Does any removed species form biogenic habitat that would be substantially altered by removal?
NO
YES
NO
YES
Is the altered abundance of any spp. likely to alter community structure through species interactions?
Is habitat alteration likely to change community structure?
NO
YES
NO
YES
Substantial change in community structure?
NO
YES
LOP:
High
Mod-high
Moderate
Mod-low
Low

3

Assumptions Used in LOP Designations

In applying the levels of protection (LOP) conceptual model, the SAT makes three important assumptions:

- Any extractive activity can occur locally to maximum extent allowable under current state and federal regulations
- For comparison purposes, an unharvested system is a state marine reserve successful in eliminating fishing and other extractive uses within the reserve
- Proposed activity is occurring in isolation from other activities (i.e. without cumulative effects of multiple allowed activities); this assumption based upon limitations in SAT's ability to assess cumulative impacts of multiple activities, not a belief that cumulative impacts do not occur

9

Summary

Approval sought for:

- Changes to conceptual model for LOP designations
- Articulation of the assumptions used in assigning LOPs
- New LOPs assigned by the SAT LOP Work Group
- LOP evaluation methods to be inserted into *Methods Used to Evaluate MPA Proposals in the North Coast Study Region* as Chapter 3

Levels of Protection – North Coast

	Level of Protection	MPA Types	Activities Associated with this Protection Level
	Very high	SMR	**No take**
	High	SMCA SMP	**Salmon** (H&L or troll in waters >50m depth); **coastal pelagic finfish**[1] (H&L, round-haul net, dip net);
	Mod-high	SMCA SMP	**Dungeness crab** (trap, hoop-net, diving); **salmon** (troll in water <50m depth); **surf and night smelts** (dip net, a-frame net, cast net)
	Moderate	SMCA SMP	~~**smelts** (H&L, dip net);~~ **redtail and other surfperch** (H&L from shore); **California halibut** (H&L); **coonstripe shrimp and spot prawn** (trap); **clams** (intertidal hand harvest); **turf-forming and foliose algae**[2] (intertidal hand harvest); **salmon** (H&L in waters <50m depth)
	Mod-low	SMCA SMP	**Pacific halibut** (H&L); **lingcod, cabezon, and rockfishes, and greenlings** (H&L, spearfishing, trap); **red abalone** (free-diving); **urchin** (diving), **surfperch** (H&L)
	Low	SMCA SMP	**Rock scallop** (diving); **mussels** (hand harvest); **bull kelp** (hand harvest); **ghost shrimp** (hand harvest); **sea palm** (intertidal hand harvest); **canopy-forming algae**[3] (intertidal hand harvest)

1 The grouping "coastal pelagic finfish" includes: Northern anchovy (*Engraulis mordax*), Pacific herring (*Clupea pallasi*), jack mackerel (*Trachurus symmetricus*), Pacific mackerel (*Scomber japonicus*), and Pacific sardine (*Sardinops sagax*).

2 The grouping "turf-forming and foliose algae" includes the following harvested groups: *Porphyra* spp. (Nori, Laver), *Ulva* spp. (Sea Lettuce), *Chondrocanthus/Gigartina exasperata* (Turkish Towel), and *Mastocarpus* spp. (Mendocino Grapestone).

3 The grouping "canopy-forming algae" includes the following harvested groups: *Alaria* spp. (Wakame), *Lessonioposis littoralis* (Ocean Ribbons), *Laminaria* spp. (Kombu), *Saccharina/Hedophyllum sessile* ('Sweet' Kombu), *Egregia menzeisii* (Feather Boa), and *Fucus* spp. (Bladder wrack or Rockweed).

Model Outputs

- All outputs are based on long-term steady states—*What will the system look like 30 to 50 or more years from now?*
- Each output is calculated for a range of assumptions about future fishery management outside MPAs:
  - Conservative management
  - Maximum sustainable yield (MSY)-type management
  - Unsuccessful management

Summary

8

Approval sought for:

- Methods for the bioeconomic modeling evaluation and supplemental connectivity metric to be inserted into the *Methods Used to Evaluate MPA Proposals in the North Coast Study Region*" as Chapter 8 and Appendix B
- Modeling evaluation and supplemental connectivity metric will be applied to round 1 – evaluation of *external MPA arrays* – and subsequent rounds of evaluation of MPA proposals

Model Outputs: Individual MPAs

6

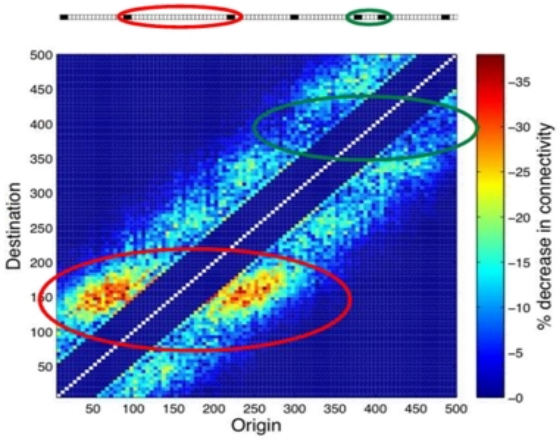
- **MPA-by-MPA results**
  - Biomass
  - Larval self-recruitment
  - Self-persistence
- **Deletion analysis**
  - How does removal of an individual MPA from an MPA network affect the expected consequences of the network?
  - Change in overall biomass if a given MPA were deleted

Supplemental Connectivity Metric

Neutral allele model with finite population size:

- Introduce new allele at patch *i*, calculate average number of generations for allele to spread to every other patch
- Transmission occurs by movement of finite individuals (stochastic)
- Metric: Percent increase in transmission time from unfished state

Example MPA Array



- Dark blue = no change in connectivity
- Warmer colors = decrease in connectivity

There is no "equilibrium", there is random drift with no stability until one or another (neutral) allele is fixed.

Key Points Regarding Genetic Drift – Size And Spacing
Allele Frequencies fluctuate at random but eventually become fixed
Similar sub populations will diverge in allele frequencies and may eventually become fixed,

The probability at any time that an allele will become fixed equals the frequency of the allele at that time.

These statements all refer to statistical expectations as most probable outcomes, rather than deterministic predictions.

The 'rate' at which the events occur is greater in small populations The size that matters is the effective population size.

THE QUESTION - **Submitted and as posed on 02 11 2010 webinar the neutral allele model and size and spacing:**

1) Have minimum populations (size) been established for marine ecosystem primary producers?

Continuation of comments on kelp related to today's subjects speaking from the view of a seaweed harvester I have a lot of concerns regarding the model outputs described earlier and also the neutral allele model with the finite population size the supplemental connectivity metric.

"My reasons are that most of the time we look at increases in biomass to reflect ecosystem function as levels of productivity, but actually biomass measurement is a proxy for these measurements. In particular with seaweed, my knowledge is from the perspective of seaweed, the highly productive communities that are the primary producers at their near climax state would not show up in the productivity models because of the way it would appear – (cell loss, herbivory)."

"We hear tallies of edible algae and they are not weighted across age class, species, or site distribution. This in particular includes the canopy forming algae."

"In the NCC Study Region, the Evaluations and Benefits to Seabirds and Waterfowl from proposed MPAs, does not mention (at all) any impacts to foraging habitats such as kelp, or any type of edible species of seaweed or substrate. Even though harvest of kelp and edible algae species was considered and given MPA LOP, impacts to species (as forsging habitat, etc) was not even mentioned. This leads me to believe **impacts to these habitats** and their ecosystem function and services including structure, are minimal if they exist at all - given current harvest schedules (regimes) including the winter storms and annual life cycle of said habitats."

Regarding the connectivity modeling: All these allele frequencies they fluctuate at random and they eventually become fixed.

But the probability at any time, that they become fixed is only their frequency.
So basically what we are talking about here is statistical expectations in all these models as probable outcomes, rather than deterministic predictions.

Just to clarify the first question into 2 parts:

1) Have minimum populations (size) been established for marine ecosystem primary producers regarding these probable outcomes and fluctuation rates and using what distance measurements, (area or linear) as model inputs?
2) What site specific and species specific quantifiers were used to map results from neutral allele modeling in the marine ecosystem of the North Coast Study Region including drift, wave energy potential and natural disturbance rates?

The following 4 pages sets up rationale based on Peer Reviewed studies from California to Washington State on (Sea Palm) Postelsia palmaeformisn Alaria, and Laminaria which may be applicable to the LOP by Allowed Use of the Hand Harvest of Bull Kelp in the North Coast Study Region. The rationale is followed by **several questions regarding size and spacing, neutral allele modeling, genetics, dispersal, connectivity,** and MLPA MPF Goals 1, 2, 4, 6 regarding Habitat Replication and the Marine Ecosystem Primary Producers including but not limited to Bull Kelp and other Edible Algae harvested in the North Coast 'Study' Region.

Small-scale genetic structure in the sea palm Postelsia palmaeformis
Ruprecht (Phaeophyceae) Marine Biology (2006) 149: 731–742

Received: 19 April 2005 / Accepted: 4 January 2006 / Published online: 8 February 2006

Using nine microsatellite markers, evidence of genetic structure in a marine kelp, the sea palm Postelsia palmaeformis Ruprecht, was examined in the vicinity of Cape Flattery, Washington state, USA (48# 24¢ N, 124#44¢ W).

Genetic clustering analysis implemented without reference to geographic structure strongly suggested that a number of distinct genetic clusters existed among the 245 plants sampled in August in the years 1997–2001. Subsequent analysis showed that clustering was associated with geographically defined populations both among (km scale) and within (m scale) sampling sites.

Analysis of geographically defined populations revealed significant genetic differentiation among populations of plants as little as 5 m apart, evidence of genetic structuring at even smaller scales, and a sharp increase in Fst across populations separated by up to 23 m. Fst values were also high and approximately unchanging (Fst=0.470) for populations separated by greater distances (up to 11 km), consistent with a scenario of rare* **dispersal by detached, floating plants carried by variable currents.** The results corroborate natural history observations suggesting that P. palmaeformis has extremely short (1–3 m) spore dispersal distances, and indicate that the dynamics of sea palm populations are more affected by local processes than recruitment from distant populations.

Populations weakly connected by migration are expected to exhibit genetic differentiation at neutral alleles as a result of genetic drift, usually quantified by an index describing the expected probability that different alleles are fixed in different populations **Therefore, if life history patterns determine the** degree of movement among marine populations, we **would expect stronger population genetic differentiation** at smaller scales in species with relatively low dispersal rates and short planktonic durations of their reproductive propagules.

Factors other than dispersal ability, however, may also affect patterns of genetic structure (Coleman and Brawley 2005).

Although the duration that a propagule spends in the water column may be a general predictor of population structure (e. g., Waples 1987), at least two additional factors may be important. First, larvae or spores may have behaviors or adaptations that reduce gene flow relative to plankton passively dispersing in currents (Santelices 1990; Shulman and Bermingham 1995; Swearer et al. 1999; Jones et al. 1999). Second, a number of marine organisms can be transported as fertile adults through rafting (e. g., Dayton 1973; Worcester 1994), resulting in less genetic differentiation than would be expected based on the nature of the reproductive propagules. For example, in the ecologically and economically important kelps, both adults and spores may have differing probabilities of long-distance dispersal and corresponding differences in genetic structure (Coyer et al. 1997; Kusumo and Druehl 2000).

The main dispersal mode for kelp is via meiospores, which exhibit a short-lived dispersal mode generally with a maximum swimming period of 72 h (Reed et al. 1992). Spores can continue to photosynthesize and be viable for longer periods (Kain 1964; Reed et al. 1992), however, and for those species having positive buoyancy because of pneumatocysts or hollow stipes, dislodged macrophytes may transport spore-bearing tissue (e.g., Deysher and Norton 1982). Disentangling the roles of multiple modes of potential dispersal is therefore important. Here, we report an analysis of genetic structure among populations for a marine kelp, the sea palm (Postelsia palmaeformis Ruprecht).

Postelsia palmaeformis occurs widely in the intertidal zone of rocky wave-swept shores of the northeast Pacific Ocean from Monterey Bay, California to the northern end of Vancouver Island, British Columbia (Abbott and Hollenberg 1976), where it grows in dense populations that exhibit some of the highest productivity rates known (Leigh et al. 1987).

P. palmaeformis is an annual that undergoes an alternation of generations, with a conspicuous diploid sporophyte stage during the summer and a microscopic haploid dioecious gametophyte **stage during the winter.**

The sporophyte produces flagellated meiospores that are released into the sea (Paine). Dayton observed that heavy sporulation occurred in P. palmaeformis when the plant was exposed during low tide. Therefore, P. palmaeformis is thought to have low dispersal capabilities, typically limited to a maximum of 1 to 3 m from the parents based on observations of interannual spatial locations of unmanipulated populations, population removal experiments, and invasion of cleared plots adjacent to natural populations (Dayton 1973; Paine 1988; R. T. Paine personal communication; JTW and CAP unpublished data).

Hence, we would predict strong genetic structuring of P. palmaeformis populations on a small scale. However, sporogenous plants that are ripped from the rocks by waves (Paine 1979) can float via currents to a distant spot and drop their spores, raising the possibility of an important alternative mechanism of migration. Furthermore, although male and female spores look identical and the next generation of sporophytes develops from the site of female gametophyte settlement, it is possible that male spores differentially travel greater distances or that P. palmaeformis sperm can travel some distance throughout the water column like ascidian sperm (e.g. Grosberg 1991; Yund 1995), thereby increasing gene flow. Coyer et al. (1997) used RAPDs and M13 fingerprinting to examine the genetic structure of P. palmaeformis populations <1 to 250 km apart in Central California (Coyer et al. 1997).

They found **strong evidence for differentiation among populations** 16 and 250 km apart, and some evidence for genetic differentiation among populations as little as 25 m apart when using M13 fingerprinting but not when using RAPDs, due to the different power of resolution of the methods. The limited number of populations examined (3) and low sample size per population (3–4) could not provide strong resolution of the pattern of differentiation with distance at smaller scales (<25 m). Here we use microsatellite markers to explore smallscale population structure in P. palmaeformis.

Aside from providing basic information on the population structure of this ecologically significant kelp, this information is of use in addressing the scale of dispersal and the probable success of restoration programs for sea palm metapopulations. This is important because the sea palm is harvested in some areas (Kalvass 1994).

Populations separated by as little as 5 m had genetic differentiation (Fst) values significantly greater than zero. Furthermore, individuals within small-scale populations were significantly differentiated, consistent with population structure at smaller spatial scales than those sampled (a ''Wahlund effect''). We interpret these patterns as resulting from low dispersal. Theoretically, vegetative reproduction could also contribute to such a pattern. Vegetative reproduction of the sporophyte is not known in P. palmaeformis and our genetic data do not support the most plausible mechanism, budding multiple stipes with fronds from the same holdfast, because plants collected from the same tangle of holdfast were not more genetically similar compared to individuals with clearly separated holdfasts at the patch scale

Inbreeding can increase homozygosity among individuals beyond the effects of drift alone. Ecologically, inbreeding generally is associated with limited dispersal of offspring and gametes. In P. palmaeformis, there is no evidence for alternative mechanisms such as an active behavioral preference for mating with siblings or strong outbreeding depression. **Given the small spatial scales over which P. palmaeformis appears to disperse,** the small population sizes necessarily contained in small areas, and our ability to start experimental sea palm populations from a single individual (Paine 1988; J. T. Wootton and C. A. Pfister, unpublished data), selfing probably occurs to some extent in this species.

However, the extent to which spore dispersal versus adult transport drives genetic structuring is unknown for any seaweed species and will be possible only with extensive individual sampling and mapping. Analyzing shifts in the pattern of isolation by distance over a range of scales, as we have done, provides some insight into this issue when combined with knowledge of general dispersal modes in different life stages of a species. Within sites, we found a significant positive relationship between genetic differentiation and distance up to a distance of 23–33 m. Although isolation by distance is the expected result for a species with relatively limited dispersal, the evidence supporting isolation by distance in marine organisms is mixed.

Our study of P. palmaeformis indicates isolation by distance over relatively short scales (within sites), but no such pattern at large scales. This pattern is consistent with the two hypothesized modes of dispersal in this species, because the scale at which the break occurs corresponds well with the scale of geographical habitat breaks between potential sea palm habitats (i.e. discrete intertidal rock benches).

Within rock benches, short-distance spore and gamete dispersal would be expected to produce a slow diffusive spread of genes through the population as gametophytes mate with close neighbors, causing closer sites to be less differentiated than more distant sites. Dispersal between rock benches, however, probably requires dispersal of detached reproductive adults via **drift, which is more likely to produce haphazard dispersal patterns with distance** given the inconsistent directions of nearshore currents. Reusch et al. (2000) report a similar pattern for

western European populations of the seagrass Zostera marina, with a break at around 2,000 km, but the cause of this pattern is currently unclear. As more genetic data on population structure in marine algae become available, we can assess whether isolation by distance is exceptional or typical for these taxa.

In contrast, there is weak or little evidence for a relationship between geographic distance and Fst (genetic differentiation values) in other macroalgae, including the kelp Alaria marginata (Kusumo and Druehl 2000), the fucoid F. spiralis (Coleman and Brawley 2005) and the green alga Cladophoropsis membranacea (van der Strate et al. 2003), patterns that might be ascribed to some combination of historic variability in current regimes or present day gene flow and genetic drift. The limited dispersal of P. palmaeformis strongly indicated by our findings has several implications.

First;
We might expect negative effects on genetic variation in local populations, which might reduce population performance. Such limited dispersal, however, might strengthen the likelihood of local adaptation if sufficient genetic variation is present.

Second;
The population dynamics of this species should be strongly influenced by **local processes** including intra- and interspecific interactions, **rather than through large-scale recruitment-driven fluctuations.** Because other organisms share the limited dispersal capabilities of P. palmaeformis, this situation may apply to a number of other marine benthic species. As these species interact with long-distance dispersers such as mussels (Paine 1979), however, recruitment from remote communities may still affect P. palmaeformis dynamics indirectly.

Hence, the development of multispecies theory accounting for regulation of populations at multiple scales may be necessary to understand the dynamics of benthic communities, and may produce some unexpected patterns. Finally, limited dispersal is of importance in the context of harvesting this species (Kalvass 1994). Reduced population size through harvesting may result in reduced local genetic diversity through enhanced genetic drift, and the loss of beneficial alleles may not be replaced because of low dispersal from other populations. Additionally, if overharvesting drives local populations extinct, the extremely limited dispersal documented here makes repopulation from other sources unlikely. Hence the management of P. palmaeformis harvest should explicitly account for its limited dispersal lifestyle.

06KusumoetalMB.pdf
458 kb PDF

Just a few more questions!
MODEL INPUTS

3) What would be the equivalent analysis of a "Fleet Response" to spatial abundance in species models of harvested Canopy and Turf Forming Edible Algae and Bull Kelp?

4) What would be the equivalent analysis of species-specific and site specific life history

(growth, natural mortality, fecundity, transport, generational regeneration) used in the calculation of biomass, as a proxy or crosswalk to productivity models?

MODEL OUTPUTS - ENTIRE MPA NETWORK

5) What is the equivalent Conservation Map of larval settlement and biomass and total biomass (summed over entire study region, and the weighted sum across species) for each species of Kelp and Algae listed as a Key Habitat Type, or those that form their own habitat?

MPA BY MPA RESULTS

6) Change in persistence??

Given the seasonal spatial fluctuations of marine taxa of flora in the nearshore at depths of 10m and less where phylla response to photosynthesis is greatest and where most edible hand harvested species are harvested from shore, what other influences on abundance are being considered?

Variables include turbidity, settlement of gametes and, recruitment/recolonization, cycles of seasonal weather patterns, storms, delayed reproduction, shifting substrate material (rock to sand in successive seasons which can greatly influence loci range), allele transport and survival distance/time relationships in a dynamic marine ecosystem* and any theoretically appropriate temporal and spatial shifting of recolonization substrate for settlement and regeneration of populations via reproductive propagules.

7) As stated at the top of p13: Meiospores, exhibit a short-lived dispersal mode generally with a maximum swimming period of 72 h (Reed et al. 1992). **Spores can continue to photosynthesize** and be viable for longer periods (Kain 1964; Reed et al. 1992), however, and for those species having positive buoyancy because of pneumatocysts or hollow stipes, **dislodged macrophytes may transport spore-bearing tissue (e.g., Deysher and Norton 1982).**

- The dynamic of the scale of the (LME) Large Marine Ecosystem includes the nutrient rich upwelling along our shores and the free flowing rivers and streams within the North Coast 'Study' Region, strong winds and oceanic to nearshore currents, intertidal splash zone wave forces of high energy transfer, exposure to acidification, and sunburn.

Conservation and sustainability are default mechanisms of the current harvest of marine species of plants as described in supporting documentation of 01 21 2010 and 02 11 2010. Given all present documentation and the state of the science regarding Seaweed flora and taxa related to ecosystem services (function and structure) provided by the presence of habitat and key habitat formed by species in the NC 'Study Region', a request is made of the NC SAT to re-visit the LOP for all hand harvest methods of algae and kelps.

Specific baselines of productivity and/or impacts to ecosystems services and function are not borne out in the size and spacing guidelines, the allele connectivity model, or the Spatial Bioeconomic Model Evaluation Method for the North Coast Study Region Presented to the MLPA Master Plan Science Advisory Team February 11, 2009 • Webinar and Teleconference by Dr. Chris Costello, Member • MLPA Master Plan Science Advisory Team

One final comment regarding wet weight amount of harvested edible seaweeds by age class and it's relationship to productivity models, and site fluctuations of abundance of biomass.

Productivity and biomass relationships used in fish population models are not necessarily accurate as applied to marine plant productivity or structure and relationship to ecosystem function and services provided by species and age class. A jump in reported harvest weight may be due to (age class and site) timing of harvest rather than any other parameter such as

1. area in meters squared,
2. number of individual plants harvested,
3. linear distance measurement (if applicable) of harvest,
4. number of licensed harvesters including any latencies (non-use licensed)

As has been pointed out, there was an increase to 4,000 lbs harvested of Sea Palm Postelsia at Sea Lion cove in 2008. But the harvest was in July, and late by all reckoning. But this calculation should not be cause for concern in and of itself.

The structure at the scale of the fronds (as harvested) is coarser, wider, thicker, and longer in near climax age classes. The same number of plants, and same amount of area (averaged across several years of recorded persistence) can yield different results at different times regarding biomass and productivity relationships inside seasonal variability of environmental conditions coupled with allele frequency and transport, thus suggesting that over the last thirty years of local commercial and subsistence hand harvest methods, no measurable impacts have occurred. None, zip, zero, nada.

In the case of kelp and edible algae (seaweeds):
Aerial surveys and biomass/persistence calculations as model inputs or data field entries for nearshore habitat MPA design (such as is used on MarineMap) is probably the most inaccurate of all analyses protocols. This will be the subject of my final comments regarding source data and model inputs. But not for a couple days! Thank you SAT Members for your dedication.

Respectfully Submitted by
Tomas DiFiore
Commercial Seaweed Harvester for
Ocean Harvest Sea Vegetable Company
Board Member Albion Harbor Regional Alliance

"In so far as the propositions of mathematics apply to reality they are not certain, and in so far as they are certain, they do not apply to reality."
Albert Einstein

From: thaifurn@aol.com
Sent: Thursday, February 25, 2010 7:04 AM
To: MLPAComments
Subject: Sea urchin data on the north coast

1) Pete Kalvass and Konstantine Karpov collectively have 2+ decades of urchin fisheries data on the North Coast. Is there information not being utilized because it is not valid? 2) By my estimation, there are 2+ million pounds of virgin urchin stocks in the Caspar Closures. Countless millions in the other closure areas. Is there a specific amount of sea urchin barrens/poundage you are trying to reserve, or is it the goal to just get rid of all commercial fishermen? (I have asked questions in person at SAT meetings in Santa Barbara, other online forums, and always receive a hearty thanks,yet never any answers.)Mark Nicks

Patrick Higgins
4649 Aster Road
McKinleyville, California 95519
(707) 822-9428

November 18, 2009

Ms. Cindy Gustafson, Chair
Marine Life Protection Act Blue Ribbon Task Force
C/O California Natural Resources Agency
1416 Ninth Street, Suite 1311
Sacramento, CA 95814

Re: North Coast Region Governmental and Tribal Concerns with Blue Ribbon Task Force and Marine Life Protection Act Implementation

Dear Ms. Gustafson,

Although I am a Humboldt Bay Harbor, Recreation and Conservation District Commissioner, I make my living as a consulting fisheries and watershed scientist. I was instrumental in the formation of a sub-committee dealing with Marine Life Protection Act (MLPA) issues and we are currently beginning work on production of an external Marine Protected Area array and look forward to working with you constructively. However, I felt it would be useful for me to inform you of reservations governments and tribes have regarding the MLPA Initiative on the North Coast. I am providing copies of a letter that went from 15 governments and tribes to Secretary Crisman and it clearly states our concerns, many of which have not been allayed.

Science Advisory Team Model Has Major Flaws

Designation of MPAs is based on sea floor topographic data under the assumption that there are known biological associations with rocky points, pinnacles and other recognizable features can lead to substantial problems with meeting intended conservation benefits. Specifically, there are no data on larval drift, where rockfish spawn and where juvenile rookeries are located. Assumptions on larval drift and juvenile recruitment have no basis. **Residents, governments and tribes of the North Coast Region are concerned that a conservation strategy lacking key biological data does not provide sufficient basis for selecting locations of MPAs.**

Dr. Ray Hilborn has also pointed out the MLPA SAT has been unduly biased towards numerous small conservation areas, whereas benefits from larger areas is likely to be accrued. **Unlike areas of much of the California coast, we may have the ability to locate substantially larger MPAs here that are both less economically constraining and more likely to serve the intended purpose of protecting biodiversity**. It would be most unfortunate if the BRTF and MLPAI were to force us to submit to MPA locations determined by flawed model outputs and you should not expect us to acquiesce to such a decision.

Difference in Fishing Effort and Stock Conditions from Other California Regions

Many areas of the California coast are near very large population centers and have very calm ocean conditions for months at a time. Over-fishing has occurred in places like the California Channel Islands and has lead to reduced species diversity, abundance and harvests. Significant conservation

steps are needed in these areas where over-fishing is pervasive and closures of some areas can trigger huge increases in biomass and significant increases in species diversity (Lubchencko et al. 2007), but the benefit of such actions in areas not over-fished (Worm et al. 2007) can be much different (Hilborn 2006).

Hilborn et al. (2006) assert that many areas of the California coast where MPA arrays have been previously implemented are not overfished and that MLPA implementation will not protect fish stocks nor lessen fish harvest, only shift its location.

> "Further, the perception that rocky bottom fishes are presently overfished is incorrect. The SAT apparently did not consider or seriously underestimated the conservation benefits afforded by areas protected by measures other than restrictive MPAs, or marine reserves. For many species, especially those with wide dispersal patterns, the other forms of protection (e.g. existing fishery management measures) are much more effective than MPA status. For example, the enactment of MPAs will have little effect on the annual take or abundance of most groundfishes because their management includes the use of annual quotas. Therefore, the annual take for these species will be the same with or without MPAs; but MPAs will determine where the fish are taken" (Hilborn et al. 2006).

If the effort shift away from MPAs is into important spawning or nursery areas, negative effects to fish populations and their abundance could occur.

Ecological and Economic Consequences of Poor MPA Site Selection

While the benefit of closing areas to fishing that are over-exploited is well recognized, results of establishing preserves in areas that are not over-fished do not necessarily increase biomass or diversity (Hilborn et al. 2006). In fact if areas included in MPAs are not essential for breeding or used extensively as a nursery, fishing effort no longer allowed there may shift to areas adjacent that may be spawning or juvenile fish recruitment areas. Furthermore, if the size of MPAs is insufficient, then benefits of additional recruitment into adjacent areas that remain open to fishing may not be accrued (Hilborn et al. 2006). Under this scenario one could decrease biomass, recruitment and catch.

We were concerned by the BRTF decision on the North Central Coast (NCC) region MLPAI "preferred alternative" that will lead to the closure of both Lighthouse Reef and Saunders Reef to the north and south of Pt. Arena. This is likely to result in loss of critical financial mass to support operation of the Point Arena Pier, which was built with a $10 million federal grant. The City of Point Arena has 1500 residents and a 25% unemployment rate and the closure is another critical blow to both the local economic vitality and the quality of life for local residents. **If MPAs are implemented near fishing communities such as Ft. Bragg, Shelter Cove, Trinidad and Crescent City, similar economic consequences are likely to ensue. If most MPAs are sited near ports and gas prices rise to $10 per gallon, then access to fish stocks could be cut off and citizens of the region deprived.**

North Coast has Indigenous People Inhabiting Aboriginal Territories

Native American harvest is not only an economic issue but also one of social justice. The North Coast has numerous Indian Tribes that inhabit their ancestral territories and have an unbroken tradition of foraging and fishing on the North Coast that dates back thousands of years.

Consequently, the loss of such rights disrupts their cultural traditions and abridges their right to traditional subsistence harvests guaranteed by Treaty Rights. The NCC MLPAI preferred alternative shuts access at Stewarts Point (within the Horseshoe Point SMR) to Pomo Indians and the residents, governments and tribes of the North Coast find this unacceptable and alarming. We hope that the MLPAI will agree to a government to government consultation per the request of the National Congress of American Indians last month.

Flaws in Economic Analysis

The current MLPAI doesn't consider sport fishing economic values, which are very high on the North Coast, and also does not take into account economic multipliers created by such things as processing, shipping and wholesale and retail seafood marketing. The lack of data and narrow focus of economic studies supporting the MLPAI means that the economic consequences of unjustified closure of commercial and sport fishing are grossly underestimated. In fact such closures would send ripple impacts through the retail sector, marinas and boat sales and maintenance as well as causing a major decline in tourism.

Blue Ribbon Task Force Authority

Governments and tribes of the North Coast have major reservations about you authority as previously stated in our letter to Secretary Crisman. Many of us are comforted that you have added our trusted governmental leader Supervisor Jimmie Smith and our former Assembly Person Virginia Strom-Martin. However, the original MOU that formed the BLTF states that up to 10 members can be seated. To really meet our regional comfort level you should have five North Coast residents. In the event that you override the concerns of those now seated to represent us capriciously, your decisions are not likely to be accepted without challenge.

Thanks again for the opportunity to address you and you or your staff should feel free to call me at any time.

Sincerely,

Patrick Higgins

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Pat Higgins
→ Humboldt Harbor
District
Submitted Nov 18th

June 5, 2009

Mike Chrisman, Secretary
California Natural Resources Agency
1416 9th Street, #1311
Sacramento, CA 95814

Re: Marine Life Protection Act Initiative Process for the North Coast Study Region

Dear Secretary Chrisman,

This letter represents a consensus view of interested local government agencies, tribes and port authorities within the Marine Life Protection Act (MLPA) Initiative North Coast Study Region. It is our understanding that the MLPA Initiative will begin our Marine Protected Area (MPA) planning process in late 2009 or early 2010. We are united in our commitment to assist the State with MLPA implementation. However, as described below, we have several concerns regarding the proposed MPA planning process. We are anxious to discuss these concerns with you and collectively determine how we can improve the process for the North Coast Study Region.

1. **Insufficient data are available for science-based North Coast MPA design.** We have reviewed the existing ecological data and find it inadequate for undertaking a scientifically sound MPA design process in the North Coast Study Region. Despite our attempts, we have been unsuccessful in securing funds to collect needed data. Recently, partners throughout the North Coast Study Region developed a research proposal that would gather information essential to your effort. The proposal was submitted for funding to the Ocean Protection Council but was not funded. A comparison of data used by the MLPA Initiative verses other preserve design efforts would reveal that the MLPA Initiative has a low data standard which we consider inadequate as a basis for MPA design in our region. We therefore believe that implementation of the MLPA Initiative in our region should be delayed until critical data gaps are filled. In collaboration with local fishermen and scientists we can help secure funding and conduct the necessary research to support MPA planning.

2. **Implementation of MPAs without secured funds for monitoring, adaptive management and enforcement is inconsistent with the law.** The MLPA provides a sound conservation framework by calling for ". . . monitoring, research, and evaluation at selected sites to facilitate adaptive management of MPAs . . ." In addition, one of the specific goals of the MLPA is "to ensure that California's MPAs have clearly defined objectives, effective management measures, and adequate enforcement, and are based on sound scientific guidelines." The MLPA Master Plan estimates the cost of statewide MLPA implementation at $20 - 60 million dollars annually. The State's ability to fund this effort is highly uncertain, especially given the current fiscal crisis and recent news that there is insufficient funding to manage the State Park system. Although private partners may contribute funds, a secure funding mechanism for long term monitoring, adaptive management and enforcement has not been identified.

In the North Coast Study Region, the MLPA Initiative is posed to design MPAs based upon coarse and insufficient data with no realistic expectation for future monitoring, adaptive management or enforcement absent a reliable funding source. The potential economic and ecological consequences of such an effort are significant and unacceptable for our region. MLPA implementation should not occur here until secure funds are available.

3. **Blue Ribbon Task Force (BRTF).** To date, only one member of the BRTF has actively participated in fisheries and none have had experience developing fishing regulations. This is a concern because a major component of MLPA implementation involves regulation of fishing activities. The BRTF should be composed of people from the Study Region who understand and represent local interests. If a BRTF is utilized in the North Coast Study Region, we strongly believe that the members must include a balanced representation of local interests, which includes fishing.

4. **MPA Planning needs to consider existing fishery management and proposed ocean uses.** The widespread curtailment of fishing effort due to existing fishing regulations needs to be explicitly considered if further closures are pursued. Our area has suffered from severe closures which continue to provide ecological benefits and should therefore be a central consideration during the MLPA process. As an example, MPA planning needs to consider the Rockfish Conservation Area and the Klamath Management Zone, which constitute the most significant impact to fishing on the California coast. Additionally, wave power development may significantly constrain fishing access and should be considered in any proposal. Full consideration of the interrelationships between existing policies, current and future ocean uses, and MPA design will be a challenging process. Comprehensive dialogue will be necessary to ensure that existing regulatory impacts and progressive science methodologies are considered.

5. **The MLPA Initiative must minimize economic impacts to the fishing community.** Recreational and commercial fishing are proportionally more significant to our economy than in other regions. The State has a responsibility to ensure that MPAs do not compromise the short and long-term economic viability of North Coast fisheries. The MLPA Initiative has been deficient in this regard, as exemplified by proposed MPA designations on both sides of Point Arena Cove in the North Central Coast Study Region, which will have devastating impacts on the community of Point Arena. Beyond economic concerns, fish and fishing are a vital part of who we are and to impose non-science based closures could devastate our fishermen, dependent businesses and our coastal infrastructure.

6. **Restriction of traditional fish and shellfish harvest by Native Americans**. The North Central Coast MLPA process may eliminate traditional harvest of fish and shellfish by the Pomo Indians that spans centuries, if not millennia. Our North Coast Region has numerous indigenous Tribes that still reside in their ancestral territories and we find this precedent unacceptable.

Residents of our region, and we as their elected representatives, welcome efforts to maintain the health of coastal and ocean resources. However, for adequate implementation of the MLPA, the issues above must be resolved. We have always supported sound regulatory process. The limited entry programs initiated by the local fishing industry and the industry's strong objections to open seas gill netting are good examples. However, at this time, because of the cumulative regulatory impacts to our fishing economy, and the MLPA Initiative's lack of scientific documentation and secured long-term funding, we respectfully request that our areas MPA planning process be postponed. With adequate resources and time, we will work proactively with the State to implement the MLPA. However, such an effort needs to be driven by sound science, not an arbitrary timeline. MLPA implementation should result in long term benefits to ecosystems and economies; we owe it to our communities to spend the time and effort required for a scientific and comprehensive MPA planning process.

We would like to meet with you as soon as possible to discuss MLPA implementation for the North Coast Study Region. Please send correspondence to Adam Wagschal, Director of Conservation for the Humboldt Bay Harbor, Recreation and Conservation District (PO Box 1030, Eureka CA, 95501: adam@portofhumboldtbay.org: (707) 443-0801).

Sincerely,

_____ _____
Printed Name Title

_____ on behalf of _____
Signature

_____ _____
Printed Name Title

_____ on behalf of _____
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Printed Name Title

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Printed Name Title

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Public Comment - BRTF NOV 18th, 2009

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March 11, 2009

Mr. Vern Goehring
California Fisheries Coalition
1621 13th Street
Sacramento, CA 95814

Re: Authorities and Responsibilities of the California Fish and Game Commission and the California Department of Fish and Game under the Marine Life Protection Act and the Marine Managed Areas Improvement Act

Dear Vern:

You have asked for guidance on the legal authorities and responsibilities of the California Fish and Game Commission ("Commission") and the California Department of Fish and Game ("Department") provided to these agencies by the State Legislature pursuant to the Marine Life Protection Act ("MLPA"), Fish & Game C. §§ 2850-2863. In particular, it appears that both the Commission and the Department have focused exclusively on implementing the MLPA through issuance of regulations that ban or limit fishing in specific areas of offshore waters within the State's three mile state boundaries.[1] These areas are generically referred to as marine protected areas, or "MPAs," as defined in the MLPA, § 2852(c), and the Marine Managed Area Improvement Act ("MMAIA"), Pub.Res.C. § 36602(e). MPAs are a subset of Marine Managed Areas as defined under the MMAIA.

Based on past implementation and pending proposals for Southern California, it appears that the Commission and the Department do not plan to regulate (or even address) any threats to the health of marine habitat or biological diversity in coastal waters of California except by banning, or limiting to some degree, fishing by recreational or commercial fishers within the boundaries of MPAs created pursuant to the MLPA.

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[1] For example, California's Central Coast Marine Protected Areas now in place include: (1) 15 State Marine Conservation Areas (SMCA), wherein recreational and commercial fishing is limited; (2) 13 "no-take" State Marine Reserves (SMR), within which no fishing is allowed; and (3) one State Marine Recreational Managed Area (SMRMA), where recreational fishing is limited or restricted.

You also asked whether the Commission and Department have, under the MLPA, authority and responsibility to evaluate and to regulate directly, or indirectly by active cooperation with other agencies, "coastal development, water pollution, or other human activities", which were specifically mentioned by the State Legislature in the MLPA as "threatening the health of marine habitat and the biological diversity" found in California's Ocean Waters. MLPA, § 2851(c). As you know, in the MMAIA, the Legislature was even more explicit and said that California's marine managed areas "create the illusion of a comprehensive system" but fail to meet the full potential for protection and conservation. The Legislature recognized that, without a system of coordinated actions, presumably by all responsible agencies, "it is difficult for agencies to meet management objectives, such as maintaining biodiversity . . . and protecting marine resources." MMAIA, Pub.Res.C. 36601(a)(7).

Thus, by implementing the MLPA in a manner that restricts only commercial and recreational fishing activities and without regard to any other protective action, by direct regulation or by coordination with other regulatory agencies, it would appear that the Commission and the Department are not implementing the MLPA as intended by the Legislature, as plainly expressed in the MLPA and the MMAIA. Limiting MLPA implementation to restrictive regulations on commercial or recreational fishing conflicts with the coordinated management mandate in the MMAIA and is contrary to the "best readily available science" mandate in the MLPA. In fact, the Legislature was very aware that narrow, piecemeal implementation of coastal management actions (fishery management, pollution control, etc.) would result only in the "illusion" of a comprehensive system and adopted policy and program directives to avoid this kind of result.

The Commission and the Department appear to be ignoring the Legislature's mandate in both the MLPA and the MMAIA, as well as the emerging broad scientific consensus for integrated marine ecosystem management in limiting their actions to just issuing restrictive fishing regulations in MPAs.[2] The single-minded focus on only restricting fishing in MPAs will "create the illusion" of marine areas protected from all threats, when that is not the case at all. The narrow approach of regulating only fishing activity is also contrary to the mandate of preparing a plan based on "the best readily available science."

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[2] The imperative that coastal conservation and protection actions should be integrated using principles of eco-system management, especially at the local level, was recently highlighted by the Joint Ocean Commission Initiative in a report entitled *One Coast, One Future: Securing the Health of the West Coast Ecosystems and Economies (January 2009)* ("Joint Commission Report"). In addition, the Department MLPA website contains an abstract of a scientific paper co-authored by the recently nominated NOAA Administrator, Dr. Jane Lubchenko, stating that marine reserves are vulnerable to other important threats, such as chemical contamination, because the marine resources in reserves "are strongly influenced by the highly variable condition of the water masses that continuously flow through them." Alison, G.W.; J. Lubchenko and M.H. Carr. 1998 "Marine Reserves are Necessary but not Sufficient for Marine Conservation." Ecological Applications. 8:S79-S92.

1. The Provisions of the MLPA Mandate a Broader Effort of Protection for MPAs

The Legislative Findings in the MLPA begin by stating that California MPAs previously were established on a "piecemeal basis rather than according to a coherent plan and sound scientific guidelines." Fish & Game C. § 2851(a). The Findings then state, among other things, that:

> --coastal development, water pollution, and other human activities threaten the marine environment (§ 2851(c));
>
> --marine life reserves are an essential element of an MPA system because they...provide a sanctuary for fish and other sea life (§ 2851(f)).

Later, in the Definition section, the Legislature stated its intent that MPAs be "maintained to the extent practicable in an undisturbed and unpolluted state." § 2852(d). To this end, the Commission, within its authorities and discretion, has been directed to prohibit the taking of marine species and "other activities that upset the natural ecological functions of the area" How else could marine reserves serve as a true sanctuary for sea life?

That the Legislature expected a cooperative effort with other responsible regulatory agencies is highlighted in § 2855(b)(2), by directing creation of an implementation team that includes "water quality" and other special expertise. Staff from other regulatory agencies, such as the State Water Resources Control Board, must be on the team. This team helped develop a Master Plan for MPAs.[3] The Plan was to include "recommendations for management and enforcement measures...that would apply system wide or to specific types of sites and that would achieve the goals of this [Act]." § 2856(a)(2)(I). The preferred alternative for MPAs, to be adopted by the Commission, may include either or both of two objectives: (1) "protection of habitat by prohibiting damaging fishing practices *or other activities that upset the natural ecological functions of the area*" (emphasis supplied); and (2) "enhancement of a particular species or group of species, by prohibiting or restricting fishing for that species or group within the MPA boundary." § 2857(b).

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[3] Notably, the Master Plan, issued in Revised Draft form in January 2008, is filled with broad generalities and discussion of process, but includes no process or regulatory action to address mitigating water quality threats and is even devoid of any discussion of this issue. No discussion of how the Commission and the Department will address issues other than fishery management is contained in the Master Plan. In the Enforcement Section, the Plan concedes that the Department limits its enforcement responsibilities to commercial and sport fishing regulations, marine pollution incidents, homeland security, and general public safety. However, the Department is routinely involved in regulatory and permitting procedures led by other agencies.

Anticipating the need to address activities other than fishing, the Legislature gave the Commission authority to determine the activities that may upset the "natural ecological functions." § 2852(d). Determining which activities may upset natural ecological functions within MPAs is therefore essential to the Department's duty to recommend mitigation measures for any project "impacts that are inconsistent with the goals and guidelines" of the MLPA. Fish & Game C. § 2862.

In summary, the Legislature intended the MLPA to be more than another fishery management statute, but one dedicated to protecting all marine life within MPAs, if in fact such areas are established and real threats exist. Well-developed scientific authority supports the need to approach MPA management on an ecosystem, multi-disciplinary basis, of which the Legislature was well aware.

Consequently, the MLPA, to achieve its ambitious goals, can be fairly read to provide new regulatory authority to the Commission and the Department and, where such authority may be inadequate, to require the Commission and the Department to enlist other regulatory agencies in the development of a meaningful comprehensive protection plan, not just simply adopt MPAs that restrict fishing as the sole outcome.[4] Otherwise, authorities existing prior to the MLPA would have sufficed to address any unintended, serious conservation issues created by fishing, which has long been a highly regulated activity.[5] This interpretation of the MLPA is also reinforced by the separately enacted MMAIA.

2. The MMAIA Reinforces the Mandate for a Broad Protection Program

The Legislature also enacted the MMAIA, which serves as an exclamation point to the purposes and goals set forth in the MLPA. The second finding in the Act is unequivocal on the need for comprehensive protection: "The ocean ecosystem is inextricably connected to the land, with coastal development, water pollution, and other human activities threatening the health of marine habitat and the biological diversity found in California's ocean waters." Pub.Res.C. §

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[4] For example, there is a *Plan for California's Nonpoint Source Pollution Control Program* for coastal waters led by the State Water Resources Control Board and the California Coastal Commission. The plan was approved in 2000 by the U.S. Environmental Protection Agency and the National Oceanic and Atmospheric Administration as satisfying federal regulatory and funding requirements. However, there is no discussion by the Commission or the Department as to how that Plan needs to be upgraded to meet the goals of the MLPA.

[5] The Legislature also enacted the Marine Life Management Act (MLMA) in 1998, broadening the authority of the Department of Fish & Game regarding management of fishing practices. The MLPA Master Plan says "the MLMA reflects shifts in the goals of fishery management away from a single species focus on maximum yields toward sustainable yields and an ecosystem perspective." Fish & Game C. § 7056. See, *Coastside Fishing Club v. California Resources Agency*, 158 Cal.App.4th 1183 (2008) (confirming the broad powers given the Department by the MLMA)

36601(a)(2). Marine managed areas, the Legislature said, offer the benefit of addressing these problems on a comprehensive basis.

The espoused "mission" of the State's marine managed area system "is to ensure the long-term ecological viability and biological productivity of marine and estuarine ecosystems." Pub.Res.C. § 36620. Marine managed areas are to be established and managed to "conserve representative or outstanding examples of marine and estuarine habitats, biodiversity, ecosystems, and significant natural or culture features or sites." To this end, a rather elaborate interagency process is created in the MMAIA. More significantly, the MMAIA contains a set of new prohibitions on unlawful activities within designated marine managed areas. Pub.Res.C. § 36710. "In a state marine reserve, it is unlawful to injure, damage, take, or possess any ... living marine resource." Fish & Game C. § 36710. These prohibitions are not limited to fishing activity.

The Legislature also authorized agencies that create marine managed areas to regulate activities allowed within them. In this regard, the Legislature envisioned collaboration among agencies in meeting conservation goals. As an example, the Department is authorized to manage "water quality protection areas" when requested by the State Water Resources Control Board. Pub.Res.C. § 36725(e) and (f).

Despite the broad goals and intent set forth in the MMAIA, the Commission and the Department have truncated their actions in creating MPAs to only one activity (fishing) that is already strictly regulated by state and federal fishery management laws, including those relating to threatened and endangered species. It would be illogical to conclude that, after enacting the new directives set forth in the MMAIA and the MLPA, the Legislature expected the Commission and the Department to restrict themselves to what are really very traditional fishery management restrictions, particularly where there is no scientific evidence that fish harvest is in fact the critical "ecosystem problem" within the designated MPAs.

3. The Need for Integrated Ecosystem Management Is Well Recognized

Today's policy debates about appropriate coastal and ocean management reflect a consensus about the need for integrated ecosystem management. Not only do the policies set forth in the MLPA and MMAIA recognize this consensus, but so also have national policy studies. The Joint Commission Report (at page 13) is quite succinct on the need for integrated management:

> "An integrated, ecosystem-based approach is the most effective way for West Coast governments and citizens to restore, protect, and maintain the ecological and economic health of ocean and coastal areas. A key challenge to more effective integrated management is bridging administrative and political boundaries. This can be done without redrawing actual jurisdictional lines through effective coordination and complementary legislation between and among jurisdictions in an area."

Consistent with this focus on integration, in 2004, the Legislature adopted the California Ocean Protection Act (COPA) which directed all public agencies carrying out laws that protect the ocean to do so while recognizing that "the ocean ecosystem is inextricably linked to activities on land" and that "improving the quality of coastal waters and the health of fish" should be a priority for the state. Pub.Res.C. § 35510. The first duty assigned to the Ocean Protection Council, created by the COPA, is to "coordinate activities of state agencies" related to protection and conservation of ocean ecosystems "to improve the effectiveness" of these conservation efforts. Pub.Res.C. § 35615.

In summary, despite consensus and unequivocal legislative directives in the MLPA, MMAIA, and COPA, the implementation of MPAs by the Commission and the Department has been handled in the same narrow, out-dated and parochial fashion, placing the burden for protecting the ocean on commercial and recreational fishers. This can hardly be what the State Legislature intended. One cannot conclude that these forward-looking statutes can merely be used to address one aspect of the marine environment that may not in fact be a major environmental problem. Given the significant recent expansion of precautionary regulations resulting in a major reduction in coastal fishing activity and fleet size that has occurred in California over the last decade, it makes no sense to ignore all other threats to marine ecosystems when creating MPAs.

4. Single Activity Regulation (Fishing) Violates the Spirit and Intent of the MLPA

In interpreting a statute, Courts generally also review the spirit and intent of the enacted law. The Court in the *Coastside Fishing Club* case noted that "[l]aws providing for the conservation of natural resources are of great remedial and public importance and thus should be construed liberally..." (citing *San Bernadino Valley Audubon Society v. City of Moreno Valley*, 44 Cal.App.4th 593, 601 (1996). Statutes should also, the Court said, be construed to promote the general object sought to be accomplished (citing *Alford v. Pierno*, 27 Cal.App.3d 682, 688 (1972). Despite these fundamental principles of statutory interpretation, the Commission and the Department have taken an overly narrow view of the MLPA, rendering the Legislature's broader goals and objectives meaningless.

In conclusion, we believe a strong argument can be made that the Commission and the Department are violating the statutory provisions, and the intent and spirit, of the MLPA by creating MPAs that only regulate commercial and recreational fishing.

Very truly yours,

Davis Wright Tremaine LLP

James P. Walsh